MINOR AND MISCELLANEOUS BILLS

HEARING

BEFORE THE

SUBCOMMITTEE ON CRIME

OF THE

COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

ON

H.R. 1241, H.R. 1533, H.R. 1552, H.R. 2359, and H.R. 2360

SEPTEMBER 28, 1995

Serial No. 40

Printed for the use of the Committee on the Judiciary

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MINOR AND MISCELLANEOUS BILLS

THURSDAY, SEPTEMBER 28, 1995

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIME,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:45 a.m., in room 2237, Rayburn House Office Building, Hon. Bill McCollum (chairman of the subcommittee) presiding.

Present: Representatives Bill McCollum, Fred Heineman, Ed Bryant of Tennessee, Steve Chabot, Bob Barr, John Conyers, Jr., Charles E. Schumer, Robert C. Scott, and Melvin L. Watt.

Also present: Paul J. McNulty, chief counsel; Glenn R. Schmitt, counsel; Daniel J. Bryant, assistant counsel, Aerin D. Dunkle, research assistant; Audray Clement, secretary; and Tom Diaz; minority counsel.

OPENING STATEMENT OF CHAIRMAN McCOLLUM

Mr. MCCOLLUM. The Subcommittee on Crime will come to order. I really appreciate people coming out this morning. I think perhaps both parties may have conferences going on, but I want to begin this hearing.

We've got several bills to consider today, and I think this is important because it is a new precedent in some ways for this subcommittee and for this Congress. We are going to be hearing about some bills that are not massive in nature, and throughout the past decade it's been my experience that, for better or for worse, the Crime Subcommittee and the Justice Department's issues have been addressed through big omnibus crime bills. However, these big bills that contain hundreds of laws, and so forth, are not necessarily the best way to legislate. They have been necessitated in large measure because of the fact that we have a rules situation over in the Senate with the filibuster opportunities, and so on, that make it very difficult to produce individual bills in a deliberative fashion. And I realize that there is little that we can do to avoid these bills and I have strongly supported some of them even though I opposed one last year.

It's my intention to provide members of this subcommittee and Members of the House as a whole the opportunity for proposals to be considered individually where possible. And today we're going to start taking up, as I say, several of these. This is going to be the first of a series of hearings, so some who may have other bills that are not on the agenda today need not fear. We are going to deliberately go through these and see how many of the proposals that

we can get to have hearings on them and will mark up a sizable number of these as well.

Let me begin by describing today three of the bills that we have before us. H.R. 1241 is a bill that I introduced. It's called the DNA Identification Grants Improvement Act of 1995. I was introduced at the request of the FBI and the American Society of Crime Laboratory Directors. As originally drafted, it would reorder the funding levels authorized in subtitle C of title 21 of last year's crime bill. These grants, the DNA identification grants, provide funding to the FBI to operate its combined DNA index system, known as CODAS, and to the States to develop an improved DNA testing.

We are all well aware of how important DNA identification is becoming as an investigative tool to the criminal justice system. It's a positive development for both the Government and the accused since in some cases it's made the difference between guilt or innocence for those accused of committing serious crimes and it's certainly ruled out prosecutions in any number of cases.

H.R. 1241 would merely reorder the grant amounts authorized over the next several fiscal years so that more of the funds are available sooner but that the total amounts spent over the next 5 years is unchanged. The FBI's requested that these funds be front-loaded because of the significant startup costs in operating and creating DNA testing programs and databases.

After I introduced the bill, the FBI requested that only that portion of last year's crime bill making grants to the States be modified. Accordingly, H.R. 1241 will be modified at markup to reflect this change or a clean bill will be introduced so that the new funding levels are reflected.

H.R. 2359 is another bill that I introduced at the request of the Federal Bureau of Prisons in this case. This bill clarifies the method of executing Federal prisoners under a sentence of death. The bill does not expand the death penalty or affect the judicial review in any way. Under last year's crime bill a new provision was unintentionally added to title 18 that specified the method of execution for several Federal offenders sentenced to death. The method of execution specified was to be that method used in the State where the conviction occurred. If the State has no death penalty, the judge is required to select another State for purposes of determining the manner of execution.

Under this procedure, some persons convicted of the same capital crime but tried, convicted, and sentenced to death in different Federal judicial districts would be executed in different ways—some by electrocution, some in the gas chamber, and, in at least one State, by the firing squad. H.R. 2359 would amend last year's provisions to state that the Attorney General will prescribe by regulation a uniform method of execution for any person sentenced to death in Federal court. This was the law prior to the passage of last year's crime bill and the Bureau of Prisons has constructed a facility in Indiana for the specific purpose of housing death row inmates and administering capital punishment by lethal injection. I am confident that the regulation promulgated by the Attorney General pursuant to this bill will restore the previous policy.

Last of the three is H.R. 2360, I introduced also at the request of the Federal Bureau of Prisons. For some time, Federal prison of-

ficials have been telling us that it is increasingly difficult to avoid idleness and keep inmates busy. Prison industry programs have limited availability and there is only so much additional work to be done in an institution. We've also learned that Federal prisoners derive tremendous satisfaction from making products, especially toys, that can be donated to underprivileged persons. This bill would help these realities by authorizing Federal prisons to use inmate labor to provide goods or services to State and local governments and nonprofit agencies. The goods and services would be provided free of charge or at minimal cost.

These services provided by the inmate labor could only be used for the benefit of the recipient agency. Any goods made by the inmates could only be made from scrap or waste materials, and the recipient organizations would be prohibited from selling these goods. The inmate labor would be used to provide these goods or services and they would be provided by those Federal inmates who are not employed in the Federal prison industry program. Therefore, the bill will have no detrimental impact on Federal prison industry programs. The bill will also safeguard the jobs of employees in the organizations who receive inmate services by stipulating that the services cannot be provided if they will result in the displacement of an employee of the recipient or reduce the number of hours, amount of wages, or level of benefits received by any employee of the recipient.

Well, those are the brief summaries of the three bills that I have introduced today.

[The bills, H.R. 1241, H.R. 1533, H.R. 1552, H.R. 2359, and H.R. 2360, follow:]

I

104TH CONGRESS
1ST SESSION

H. R. 1241

To improve the capability to analyze deoxyribonucleic acid.

IN THE HOUSE OF REPRESENTATIVES

MARCH 15, 1995

Mr. MCCOLLUM introduced the following bill; which was referred to the Committee on the Judiciary

---

A BILL

To improve the capability to analyze deoxyribonucleic acid.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "DNA Identification Grants Improvement Act of 1995".

SEC. 2. DNA IDENTIFICATION GRANTS.

Section 1001(a) of the Omnibus Crime Control and Safe Streets Act is amended by striking paragraph (22) and inserting the following:

"(22) There are authorized to be appropriated to carry out part X—

"(A) $8,000,000 for fiscal year 1996;

"(B) $12,000,000 for fiscal year 1997;

"(C) $10,000,000 for fiscal year 1998;

"(D) $6,000,000 for fiscal year 1999; and

"(E) $4,000,000 for fiscal year 2000.".

SEC. 3. ADVISORY BOARD AND DNA INDEX.

Section 210306 of the Violent Crime Control and Law Enforcement Act of 1994 is amended by striking paragraphs (1) through (5) and inserting the following:

"(1) $4,000,000 for fiscal year 1996;

"(2) $4,500,000 for fiscal year 1997;

"(3) $5,000,000 for fiscal year 1998;

"(4) $5,500,000 for fiscal year 1999; and

"(5) $6,000,000 for fiscal year 2000.".

I

104TH CONGRESS
1ST SESSION

H. R. 1533

To amend title 18, United States Code, to increase the penalty for escaping from a Federal prison.

IN THE HOUSE OF REPRESENTATIVES

MAY 2, 1995

Mr. BRYANT of Tennessee (for himself, Mr. MCCOLLUM, Mr. SMITH of Texas, Mr. SCHIFF, Mr. HEINEMAN, Mr. EMERSON, Mr. WICKER, Mr. INGLIS of South Carolina, Mr. CANADY of Florida, Mr. LARGENT, Mr. BARR, and Mrs. CHENOWETH) introduced the following bill; which was referred to the Committee on the Judiciary

---

A BILL

To amend title 18, United States Code, to increase the penalty for escaping from a Federal prison.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

That section 751(a) of title 18, United States Code, is amended by striking "five" and inserting "10".

I

104TH CONGRESS
1ST SESSION

H. R. 1552

To amend title 18, United States Code, regarding false identification documents.

IN THE HOUSE OF REPRESENTATIVES

MAY 3, 1995

Mr. CHABOT (for himself and Mr. WYNN) introduced the following bill; which was referred to the Committee on the Judiciary

---

A BILL

To amend title 18, United States Code, regarding false identification documents.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

SECTION 1. SHORT TITLE.

This Act may be cited as the "False Identification Act of 1995".

SEC. 2. MINIMUM NUMBER OF DOCUMENTS FOR CERTAIN OFFENSE.

Section 1028 of title 18, United States Code, is amended—

(1) in subsection (a)(3), by striking "five" and inserting "3"; and

(2) in subsection (b)(1)(B), by striking "five" and inserting "3".

SEC. 3. REQUIRED VERIFICATION OF MAILED IDENTIFICATION DOCUMENTS.

(a) IN GENERAL.—Chapter 83 of title 18, United States Code, is amended by adding at the end the following:

"§ 1739. Verification of identification documents

"(a) Whoever knowingly sends through the mails, or, intending or knowing that it will be deposited for mailing, produces any unverified identification document that bears a birth date—

"(1) purporting to be that of the individual named in the document; and

"(2) showing that individual to be 21 years of age or older;

when in fact that individual has not attained the age of 21 years, shall be fined under this title or imprisoned not more than 3 years, or both.

"(b) As used in this section—

"(1) the term 'unverified', with respect to an identification document, means that the sender has not personally viewed a certification or other written

communication confirming the age of the individual to be identified in the document from—

"(A) a governmental entity within the United States or any of its territories or possessions; or

"(B) a duly licensed physician, hospital, medical clinic within the United States; and

"(2) the term 'identification document' means a card, certificate, or paper intended to be used primarily to identify an individual.".

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 83 of title 18, United States Code, is amended by adding at the end the following new item:

"1739. Verification of identification documents.".

(c) CONFORMING AMENDMENT.—Section 3001(a) of title 39, United States Code, is amended by striking "or 1738" and inserting "1738, or 1739".

I

104TH CONGRESS
1ST SESSION

H. R. 2359

To clarify the method of execution of Federal prisoners.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 19, 1995

Mr. MCCOLLUM introduced the following bill; which was referred to the Committee on the Judiciary

---

A BILL

To clarify the method of execution of Federal prisoners.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. IMPLEMENTATION OF SENTENCE OF DEATH.

Subsection (a) of section 3596 of title 18, United States Code, is amended to read as follows:

"(a) IN GENERAL.—A person who is sentenced to death shall be committed to the custody of the Attorney General. At the time the sentence is to be carried out, it shall be implemented pursuant to regulations prescribed by the Attorney General.".

SEC. 2. USE OF FEDERAL FACILITIES.

Subsection (a) of section 3597 of title 18, United States Code, is amended to read as follows:

"(a) IN GENERAL.—A United States marshal charged with supervising the implementation of a sentence of death shall use the appropriate Federal facilities for this purpose.".

I

104TH CONGRESS
1ST SESSION

H. R. 2360

To amend title 18, United States Code, to permit Federal prisoners to engage in community service projects.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 19, 1995

Mr. MCCOLLUM introduced the following bill; which was referred to the Committee on the Judiciary

---

A BILL

To amend title 18, United States Code, to permit Federal prisoners to engage in community service projects.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. PRISONER COMMUNITY SERVICE PROJECTS.

(a) IN GENERAL.—Chapter 303 of title 18, United States Code, is amended by adding at the end the following:

"§ 4048. Community service projects

"(a) Subject to the limitations of this section, and pursuant to rules prescribed by the Attorney General, the chief executive officer of a Federal penal or correctional

facility may, as part of an inmate work program, provide products or services, free of charge or at minimal cost, to private, nonprofit organizations (as defined in section 501(c)(3) of the Internal Revenue Code of 1986) or to a component of any State government or political subdivision thereof.

"(b) Products provided under subsection (a) shall be constructed in substantial part through the use of scrap or waste materials that constitute excess property, as defined in section 3(e) of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 472(e)). Such products shall not be resold by the recipient.

"(c) Services provided under subsection (a)—

"(1) shall be used only for the benefit of the recipient entity and not for the benefit of any individual or organization other than the recipient; and

"(2) shall not displace an employee of the recipient or result in a reduction in hours, wages, or employment benefits of any employee of the recipient.

"(d) No goods or services may be provided under this section by a Federal penal or correctional facility, if the provision of those goods or services would reduce the number of inmates employed at any Federal Prison Industries operations at that facility. Nothing this section shall be

construed to increase or otherwise affect the powers of Federal Prison Industries.".

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 303 of title 18, United States Code, is amended by adding at the end the following new item:

"4048. Community service projects.".

SEC. 2. CONFORMING AMENDMENTS.

(a) FEDERAL PROPERTY AND ADMINISTRATIVE SERVICES ACT AMENDMENT.—The second undesignated paragraph of section 602(d) of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 474), is amended—

(1) by striking the period at the end of subparagraph (21) and inserting a semicolon; and

(2) by inserting after subparagraph 21 the following:

"(22) the Federal Bureau of Prisons with respect to the disposal of property used to produce those products described in section 4048 of title 18, United States Code.".

(b) EXCEPTION TO PROHIBITION ON SHIPMENT OF GOODS.—Section 1761(b) of title 18, United States Code, is amended by striking the period at the end and inserting

4

", nor to products provided pursuant to section 4048 of this title.".

Mr. MCCOLLUM. I would like to get to the other witnesses who are here and who are going to tell us about bills they've introduced. Two of the three are here; I'm sure Mr. Bryant will join us before the completion of the testimony. I would first of all introduce my colleagues.

First—well, if you have an opening remark, Mr. Schumer, I should yield to you. I'm just getting to our colleagues, I guess, by courtesy or a thought pattern.

Mr. SCHUMER. Well, it's a good thought pattern to have, Mr. Chairman.

First, I'd like to say that I think that these hearings will be a little different than the last major set of hearings we had on Waco.

Mr. MCCOLLUM. I think so, too.

Mr. SCHUMER. A little less controversial, a little more abbreviated, and, you know, that's good and that's bad, I guess. I'd like to say, though, I think it's a good idea to have these hearings. These bills, I support the concepts of all of them and will probably end up supporting all of them. But, there are details that have to be worked out and that is the purpose of these hearings, and that's a good thing to do. I want to join you in welcoming our colleagues here to testify without further ado.

Mr. MCCOLLUM. That's fair enough.

Mr. Scott, do you have anything? No? Well, all right.

Let me go on and introduce our two witnesses. I don't know that they need much introduction to us, but maybe there's somebody here who doesn't know them.

First is Steve Chabot who represents the First District of Ohio. Mr. Chabot has been a schoolteacher as well as a private practicer of law. He served as a member of the Cincinnati City Council for 5 years and as Hamilton County commissioner for 5 years, and he is another valued member of our Crime Subcommittee. So I don't know how I could very well be introducing him and he be unknown to us, but obviously we're introducing you as a witness today, Steve.

The second is a friend from over in the Banking Committee with me. It's good to have you with us. Albert Wynn represents the Fourth District of Maryland. Mr. Wynn served as executive director from Prince George's Consumer Protection Commission from 1979 to 1982; he then served for 3 years in the Maryland House of Delegates and for 5 years in the Maryland State Senate. And I, of course, as I said, I have the privilege of serving with Al over in Banking Committee.

I welcome both of you here, and when Ed Bryant comes, as I am sure he will shortly, I will be glad to introduce him.

Mr. Chabot, would you like to describe your legislation for us and—or give us words of wisdom? Please do.

STATEMENT OF HON. STEVE J. CHABOT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. CHABOT. I'd be happy to.

Thank you very much, Mr. Chairman, for scheduling this hearing to consider H.R. 1552, which is the False identification Act of 1995.

Before I address the merits of the bill before us, I just want to pay tribute to my good friend and colleague from Maryland, Con-

gressman Albert Wynn. Since being elected to Congress, Al Wynn has been a driving force behind efforts to stem the tide of casualties which result from illegal underage drinking. He first introduced the False Identification Act in the 103d Congress, and as the principal cosponsor of H.R. 1552, he and his staff have worked tirelessly to pass the bill into law. I want to thank Congressman Wynn for all of his hard work, and I also have the honor and privilege to serve on another committee with Congressman Wynn. We're on the International Relations Committee together and have worked well together on that committee, and so I'm just very pleased to have him here today, and thank him very much for his hard work in this important effort.

Mr. Chairman, H.R. 1552 amends the False Identification Control Act of 1982 by reducing from five to three the number of false ID's one may possess before being fined or imprisoned under the act. There is no legitimate reason for anyone to be a purveyor of false ID's. Such documents undermine the State's efforts to regulate the drinking age, and they lead to carnage on the Nation's highways. This provision of the bill toughens current law but it does not, and I want to emphasize, it does not expand Federal jurisdiction. Further, the bill prohibits the use of the U.S. mail to send unverified identification documents to minors, and we intend to fine-tune the postal provisions at markup to make clear that we are cracking down on mail order enterprises that traffic in false ID's.

We think the False Identification Act is a good bill. We think its adoption will help in the battle to curtail illegal, underage drinking, and we look forward to working with the subcommittee and the Justice Department in the weeks ahead as we move toward passage of the bill.

I thank you, Mr. Chairman, and I thank the other members of the committee. Most particularly, I thank Congressman Wynn for his fine efforts in this bill.

[The prepared statement of Mr. Chabot follows:]

PREPARED STATEMENT OF HON. STEVE CHABOT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Thank you, Mr. Chairman, for scheduling this hearing to consider H.R. 1552, the False Identification Act of 1995.

Before I address the merits of the bill before us, I just want to pay tribute to my good friend and colleague from Maryland, Congressman Albert Wynn. Since being elected to Congress, Al Wynn has been a driving force behind efforts to stem the tide of casualties which result from illegal, underage drinking. He first introduced the False Identification Act in the 103rd Congress, and, as the principal co-sponsor of H.R. 1552, he and his staff have worked tirelessly to pass the bill into law. And I want to thank Congressman Wynn for all of his hard work.

Mr. Chairman, H.R. 1552 amends the False Identification Control Act of 1982 by reducing from five (5) to three (3) the number of false ID's one may possess before being fined or imprisoned under the Act. There is no legitimate reason for anyone to be a purveyor of false ID's. Such documents undermine the states' efforts to regulate the drinking age, and they lead to carnage on our nation's highways. This provision of the bill toughens current law, but it does *not* expand federal jurisdiction.

Further, however, the bill prohibits the use of the U.S. mails to send unverified identification documents to minors. And we intend to fine-tune the postal provisions at markup to make clear that we are cracking down on mail order enterprises that traffic in false ID's.

We think the False Identification Act is a good bill. We think its adoption will help in the battle to curtail illegal underage drinking. And we look forward to work-

ing with the subcommittee and the Justice Department in the weeks ahead as we move toward passage of the bill.

Thank you, Mr. Chairman.

Mr. MCCOLLUM. Mr. Wynn, would you like to——

STATEMENT OF HON. ALBERT RUSSELL WYNN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Mr. WYNN. Thank you very much and good morning, Mr. Chairman, members of the committee.

It is my pleasure to be here today in support of H.R. 1552, and I want thank you for calling this hearing. I want to stop for a moment and thank my colleague, Steve Chabot, for his hard work and leadership on this bill and thank him for his very gracious and kind remarks. It's been a real pleasure working with him and his staff.

Mr. Chairman, as you may know, 114 of our House colleagues have cosponsored the False Identification Act of 1995, recognizing the need for stronger legislation to address the problem of the manufacturing and distribution of false identification. It has proven to be a major contributing factor in underage drinking. Use and manufacture of false identification have become a growing problem for many local law enforcement officials, has literally become a cottage industry on many college campuses.

My colleague has very ably described the specifics of the bill, so I will not repeat them, but just to give you a sampling of the significance of this issue, let me cite a few examples. In 1993, a Georgetown University student was arrested and charged with false ID's and mailing them to hundreds of college age students. It was reported that in just 3 months he made nearly $30,000. In 1994, a George Washington University student pleaded guilty to manufacturing and mailing fake identifications to thousands of underage students in several States. In 1995, in Washington, DC, a 16- and a 22-year-old were charged with 40 counts of manufacturing false identifications. At that raid, authorities seized $40,000 worth of computers and graphic equipment, blank driver's licenses, and several hundred order forms for licenses from the District of Columbia, Maryland, Virginia, and New Jersey. Some of the orders came from underage students at George Washington University, Georgetown University, University of Maryland, and Villanova. According to officials, the two gentlemen said they made $15,000 a week selling fake ID's.

I think these are just a few of the examples of the significant traffic in false ID's that's going on right now. I think this problem is very significant. It confounds local law enforcement officials, it confounds liquor regulators, or liquor inspectors, as the case may be, and also bar owners and members of the industry who have to engage in a constant battle with sophisticated computers, graphics, cameras, and high tech copying equipment. I think this bill goes a long way in addressing it.

I would just conclude by noting that, according to an Inspector General report in 1991 entitled "Youth and Alcohol Laws and Enforcement Report," it highlighted several concerns and recommendations that local enforcement officials would like to see Federal legislators address. They include, one, limiting teenagers'

access to fake—excuse me—false identifications and two, strengthening Federal laws to make it illegal to sell anything through the mail which is designed to pass as a legal ID or State license.

I already said, Mr. Chairman, I believe the bill addresses both of these concerns by tightening the laws or certainly more fine-tuning may be in order, in which case we would be happy to work with the committee and representatives of the Justice Department.

Again, I want to thank Mr. Chabot for his hard work and leadership on the bill. And thank you for allowing me to testify.

[The prepared statement of Mr. Wynn follows:]

PREPARED STATEMENT OF HON. ALBERT RUSSELL WYNN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Mr. Chairman, I would like to take this opportunity to thank you for conducting this hearing today on H.R. 1552, the False Identification Act of 1995. I appreciate your recognition of the importance of this small but important piece of legislation. I would also like to thank my colleague Rep. Steve Chabot for his hard work and leadership in working with me on H.R. 1552. This is truly a bi-partisan measure.

Mr. Chairman, as you know over 114 of our House colleagues have co-sponsored the False Identification Act, recognizing the need for stronger legislation to address the problem of the manufacture of false identifications.

The use and manufacture of false identifications have become a growing problem for many local law enforcement officials and has become a cottage industry on college campuses throughout the country. On many campuses, the manufacture and sale of fake ID's have become entrepreneurial ventures, while working in the college bookstore has become a thing of the past.

In 1993, a Georgetown University student was arrested and charged with making fake ID's and mailing them to hundreds of college aged students. It was reported that in just three months, he made nearly $30,000.

In 1994, a George Washington University student pleaded guilty to manufacturing and mailing fake identifications to thousands of underage student in several states.

In 1995, in Washington, D.C. a 16 and 22 year old were charged with 40 counts of manufacturing fake identifications. At that raid authorities seized $40,000 worth of computers and graphic equipment, blank driver's licenses and several hundred order forms for licenses from the District, Maryland, Virginia and New Jersey. Some of the orders came from underage students at George Washington University, Georgetown University, the University of Maryland and Villanova. According to officials the two gentlemen said they made $15,000 a week selling the fake licenses.

These are just three two examples of how individuals have turned illegal manufacturing of ID's into profitable business ventures.

As noted above further compounding the problem for law enforcement officials, liquor regulators and bar owners are in constant battle with sophisticated computers, graphics, cameras and high-tech copying machines which make the manufacturing of fake identifications very easy.

Mr. Chairman, law enforcement officials need more help from the federal government to assist them with the booming business of fake ID's. According to an Inspector General Report in 1991 entitled "Youth and Alcohol: Laws and Enforcement," the report highlighted several concerns and recommendations that local law enforcement officials would like to see federal legislation address. They include:

(1) limiting teenagers' access to false identifications to purchase alcohol, and

(2) strengthening federal law to "make it illegal to sell anything through the mail which is designed to pass for legal ID or a state license."

Mr. Chairman, H.R. lS52 attempts to address law enforcement officials concerns in three simple ways:

Currently, before a jail sentence or fine can be imposed an individual can possess up to five (5) false identifications. Our bill would amend the False ID Control Act of 1982 and reduce that number to three (3);

Second, it penalizes individuals who mail false ID's by imposing a fine and/or prison sentence of a maximum of up to three (3) years;

Third, the bill also requires senders of ID's to verify the age of individuals named in the document using official documents such as passports or birth certificates.

Mr. Chairman, the manufacturing and selling of fake ID's is a big problem in our communities which results many times in alcohol related deaths. We must work to

strengthen federal law to decrease teenagers access to false identifications by cracking down on individuals who manufacture these ID's.

I believe that H.R. 1552 makes a good faith effort to address this problem and works to discourage the use of fake ID's.

However, it is my understanding that the Administration has expressed some concerns with Section 3 of the bill with regards to the "Verification of Mailed Identification Documents." Representative Chabot and I would be pleased to work with the Administration to address their concerns to provide a stronger and more focused bill to address the problem of false identifications used by minors.

Again Mr. Chairman, I thank you for a holding this hearing and urge the support of the Judiciary Committee.

Mr. MCCOLLUM. You're certainly welcome.

Before I go to Mr. Bryant, with his indulgence, I think because both Mr. Wynn and Mr. Chabot are here on the same bill and have just finished testifying, I would like to have us ask questions about this particular bill, and then you don't have to sit for Mr. Bryant's bill which is entirely different. I don't have very many questions, and I doubt the panel does also, but there are some that I am concerned about.

The bill is great, I think, with regard to the portion at least that deals with reducing the number of the ID cards. This is really important for all of us. It's important in the immigration area. It's important in the area for drunk driving. But, I'm curious about the creation of a new crime of sending an unverified identification document through the mail and, for both of you, Mr. Wynn and Mr. Chabot, we already have on the books crimes of producing or transferring false identification documents, and the question I have is, why do we need the new crime? What was your rationale in creating it? Or do we need it? Maybe we do.

Mr. WYNN. I think really what we're trying to focus on, and it may not have been done as artfully as is appropriate, is to focus on the responsibility of the manufacturer to verify the age of the person that is going to be the recipient of the ID. So the focus of the crime is essentially the failure to verify. And I think that may be an appropriate area for new law. But certainly I would be willing to defer to the judgment of the committee with respect to that aspect of the bill.

Mr. MCCOLLUM. Well, I think that clarifies my question, and I think that's very important. I assume you agree, Mr. Chabot?

Mr. CHABOT. I agree totally, yes.

Mr. MCCOLLUM. The term "identification document," would either of you object if we limited it to documents that are issued by local, State, or Federal governments? Or is this, because of what you just said, the manufacturer question—you know, I don't know where it all gets into here. But what do you think, Mr. Wynn?

Mr. WYNN. I don't think that's a problem. I would assume that would include documents provided by health departments as well as passport-type documents.

Mr. MCCOLLUM. Sure.

Mr. WYNN. That being the case, I think your approach is certainly correct.

Mr. CHABOT. I think it's something that we should discuss. I think it's appropriate for us to investigate that area. You know a principal concern here is, basically, generally has to do with driver's license and things of that nature where you have kids that are getting these false ID's oftentimes through the mail and then are

using them to go in and purchase beverages and become a danger not only to themselves, but to other innocent drivers on the road.

I've seen this particularly in my community. In Cincinnati we're right on the border with Kentucky, and we've had a problem with kids going back and forth between the two States. They have a little difference in the laws. The ages used to be a little bit different. So, I think some of the border areas have particular concern with the danger of how false ID's have been used.

Mr. MCCOLLUM. Well, I don't want to cover too many of these things—but you've already touched upon the problem of the mailing of things. We've thought about perhaps requiring the Government to prove a commercial purpose or prove that the mailing was part of a commercial enterprise. Would that present a problem, Mr. Wynn?

Mr. CHABOT. Excuse me, I'm sorry.

Mr. MCCOLLUM. Mr. Chabot.

Mr. CHABOT. It does not present a problem for me. In fact, we were already investigating massaging the language to make that clearer than it currently is.

Mr. WYNN. I would have to concur. I don't see any reason why commercial purpose would not cover the circumstances we're talking about. But, obviously, the mailing for money, basically, and that being the case, that's a commercial purpose.

Mr. MCCOLLUM. Sure.

Mr. Schumer.

Mr. SCHUMER. Thank you.

I'd just like to make three points. The first relates to yours, Mr. Chairman. I think the second part is kind of broad. You could find examples of the Elks Club or the Boy Scouts being prosecuted by some prosecutor who didn't pass the knot test back when he was a boy scout, and he's getting back. I don't know. That's facetious, but still—I failed the knot test in the Webelos; that's how I empathize.

[Laughter.]

Mr. SCHUMER. In any case, I think it's got to be made narrower to make sure it's commercial enterprise, to make sure that just sending through the mail isn't enough.

I just make two other points. One is, and I bring this up to all of my colleagues, we are really involved again in the federalization of crimes. Now, as this committee knows, I have no problem with that. I don't think my constituents when faced with crime are saying "Oh, well, I don't want the Federal Government to come in and be involved; I want just the local and State governments." But there's been so much talk in so many places that we should leave things to the localities and States, that I would remind my colleagues that everybody says that when they don't want something done, but not when they do want something done. This is increasing the Federal mandate in an area that has been a local area except for the interstate aspect and for sending things through the mail.

I just received a memo from the National Association of Defense Lawyers, a group I don't very often agree with in this area of crime, but they are already saying it violates *Lopez,* which is you

know the gun control case. I don't think *Lopez* has very broad reading, but that's a federalization issue.

The only other point I'd make is this: for those who manufacture these false ID's, tough penalties are, indeed, called for, and I know that's the intent of the bill. However, when you're reducing the number from five to three, I think you run into a potential problem that somebody who is underage and is carrying three false ID's with no intent to sell them, no intent to distribute them, the law states for use in an unlawful purpose and the unlawful purpose they'd be attempting is to get a drink, might face up to 5 years of jail time. I think that's somewhat onerous, and I think the appropriate penalty, particularly if it's a first offense, is taking away the driver's license to age 25 or 30—some kind of civil tough penalty that scares these kids and will not let them do it. But this is not what we want to be filling our prisons up with, is with people who for the first time used false ID's to try and get a drink.

And I would urge—I'd ask both of you your opinion of that. Was it your intent that, say, somebody who's carrying three false ID's, never sold them, never did anything, but is trying to get a drink below age, should get prison time first offense or would some civil remedy in those instances be far more appropriate? Such as in my judgment what I'd say to that person, "You can't drive until you're 25," or something like that. You tell a 17-year-old or 16-year-old they can't drive until they are 25, I think they'd rather go to Siberia.

Mr. CHABOT. I think certainly the intent here is to crack down on those that are involved in a commercial enterprise to sell false ID's to make money, and then because of the damage they are doing to society and to children that are involved. Not—clearly the target is not this child who is trying to get this drink. Obviously, we don't want him to do that, but he's not the target of this particular law.

Relative to additional Federal——

Mr. SCHUMER. Let me just pursue that because I just made a didactic point here. Would you object to some kind of refining of the language that made it clear in that instance too that a commercial enterprise was the purpose and focus of the law?

Mr. CHABOT. I think we'd have no problem with that. In fact, we were massaging this language recently and on page 2, item No. 11, we were talking about modifying the language somewhat to say instead of "whoever knowingly sends through the mails," et cetera, saying "whoever is part of a commercial enterprise involving the sale of identification documents," so making it clearer that we're talking about a commercial enterprise rather than somebody carrying documents on their person.

Mr. SCHUMER. I was referring not to section 3, which is the mailing which Mr. McCollum, the chairman, went over, but actually section 2, I guess it would be, where you reduce from five to three and the language that it tracks which is not in your bill because, as you stated, it's existing law, just talks about an unlawful purpose. I think if we are reducing it, maybe we ought to clarify that as well.

Mr. CHABOT. I think that would be entirely appropriate to clarify, and, again, that is the purpose of this hearing, to get other commit-

tee members', like the distinguished gentleman from New York's, ideas about this because we want to have the best bill possible.

Mr. SCHUMER. Great. Thank you, Mr. Chairman.

Mr. MCCOLLUM. Mr. Heineman.

Mr. HEINEMAN. Thank you, Mr. Chairman.

In line with what Mr. Schumer had to say, I read the bill, and I was going to ask you prior to his question. It doesn't say anything in the bill, the language in the bill that pertains to possession. Unless you can clarify that for me, it just says the manufacture, the production, and the sending. And I agree it would be ambiguous were it not specified that this is a commercial enterprise as it relates to the manufacture and then the sale of that or distribution of those false ID's. Would that be a correct interpretation of mine?

Mr. WYNN. If I could interject—the bill references existing law on page 1, line 8, and basically existing law prohibits the possession of five ID's. This is a section separate from the mailing section. Existing law prohibits possession of five ID's. We reduced that to three, and I believe the thinking was, and my colleague can certainly speak himself, but I believe the thinking was that we wanted to send a somewhat tougher message. A person holding five ID's, if you just slap them on the wrist, that person may well, in fact, be engaged in trafficking. So, the effect of tightening it is to reduce the number of ID's that you have. There's no reason why anyone should have more than one legitimate ID.

But I think Mr. Schumer makes an excellent point when he says perhaps we could reduce the number of ID's a person could have on his possession, but change the nature of the fine so that we would not be contemplating jail sentence for this type of thing. I may have made it more confusing.

Mr. HEINEMAN. No, I'm a little confused as it relates to State and Federal jurisdiction. I can see the commerce aspect of this in mailing using the Federal Government or mailing across State lines; it still would be the Federal Government as it relates to a violation. But possession of false ID's seems to be to be a State issue under State law as it relates to ordering those ID's for the purpose of, well, buying cigarettes or purchasing alcohol. And I——

Mr. CHABOT. If the gentleman would yield—that was one of my concerns as well. However, the law already exists on the books now. It's already Federal law that prohibits a person from having five ID's. What we are doing is toughening that law and making it three ID's.

Now we can argue whether that law should have been on the books to begin with, but it's there. So since it's there, I guess you could also talk about a person who's carrying counterfeit money on them and they're in Ohio, and should the Federal Government be involved in that, and I would argue they should be. And, generally, our problem is I, as my colleague, we've had people that are in one city that are doing this mail order, and especially on college campuses where the kids are border line as to whether they are allowed to drink at all. And so what we're trying to do is toughen an existing law and make it more workable.

Mr. HEINEMAN. One further thing, and I don't have the code here as it relates to penalties as it relates to these violations. Would there be an increased penalty for repeat offenders? I mean in the

manufacture bit, and would this pertain to Mexico as well as Canada. The business is a lucrative business. I don't believe that would come under NAFTA, but, anyhow, I'm just wondering whether someone could produce these documents in Canada and mail them here and still be under our jurisdiction as producing.

Mr. WYNN. Actually, that's a very good question. Obviously, it's not addressed in the bill, but it's certainly something I would like to see covered. Similarly, repeat offenders are not addressed in the bill, but, again, I think that would be a very good improvement in terms of toughening the bill.

Mr. HEINEMAN. Well, I should be aware of all these questions I'm asking you because I did cosponsor the bill. But if you'd like to—perhaps we can talk a little about fine-tuning the details.

I have no further questions, Mr. Chairman. I yield back my time.

Mr. MCCOLLUM. Thank you, Mr. Heineman.

Mr. Scott.

Mr. SCOTT. I'm just getting a little counseling here [speaking with staff off record]. What I'm trying to get at is we're talking possession and distribution. If I've got five ID's, false ID's, saying I'm over a certain age, a driver's license from Virginia, a driver's license from North Carolina, and a driver's license from Maryland, all identifying as overage, that's obviously possession. But if you catch me having just made up one for five different people, that's obvious I'm making it for somebody else, which is distribution.

My question is, was there a differentiation between an ID used obviously for your own purposes as opposed to an ID used for someone else's purposes, and this bill doesn't have that. It's obviously part of the present law because you didn't change that.

Mr. WYNN. I don't think present law makes a distinction on that.

Mr. SCOTT. As we go through this, I think we ought to make a distinction between distribution and possession because that gets into the commercial enterprise. If I'm doing it just to buy drinks for myself, that's one thing; it's wrong. But it's different when you're manufacturing and distributing and making $15,000 a week. I think it's slightly different. It's not part of your bill; it's part of the present law, and I think there ought to be a differentiation.

We went through a similar thing about distribution and possession a week or two ago when we talked about crack cocaine. We didn't make a differentiation. It's 5 years mandatory minimum for simple possession of a couple hundred dollars worth of crack. That's what you get. It's wrong and you get the mandatory 5 years minimum. We didn't bother to differentiate then, and I think we should have then, and I think we should here. We talked about whether you're going to consider whether or not there are going to be the Government-issued ID's. As you consider that, consider college ID's or employer ID's which would probably be as valid at a bar, I might think, as a driver's license that has a birth date on it. I would hope we would might not liberalize that too much by just sticking to the Government-issued ID's. I think a lot of college kids, if they had a college ID with a birth date on it, might be as emboldened as if they had a false college ID.

I just wanted to make those two points, Mr. Chairman, that we ought to differentiate between the possession——

Mr. MCCOLLUM. I think your point's really well made. I agree with it, and I think that as we go through this we'll get a chance to maybe delve into some of this.

Mr. SCOTT. And before I yield back, I would hope that, Mr. Chairman, you would be as agreeable as we talked about the differentiation between possession and——

Mr. MCCOLLUM. I know what's coming.

Mr. SCOTT [continuing]. Of other material.

Mr. SCHUMER. Would the gentleman yield for just one minute?

Mr. SCOTT. If I still have time.

Mr. MCCOLLUM. You still have time.

Mr. SCHUMER . The only point I would make, which counsel has pointed out, while the bill was clearly intended to deal with alcohol, it does have serious ramifications in the immigration area, though, and I think that we ought to look at those as we try and refine it.

Mr. MCCOLLUM. It does, and I appreciate it.

Mr. Wynn?

Mr. WYNN. I would just add, I appreciate Mr. Scott's comments about the differentiation as to the commercial use versus use for one's own self. I would just add, given the problem of underage drinking, it is still a matter that ought to be tightened up with respect to false ID's for one's own consumption because that is equally dangerous. I certainly appreciate the point you are making.

Mr. MCCOLLUM. I think the point both you gentlemen made to us by bringing this bill forward is real positive, and you can see from what the interest has been here that the bill is important for a lot of reasons and maybe even beyond what you originated with it. So, it will carry your names and we're going to do something else with it, but we'll probably mark it up very shortly here. Thank you both for coming.

Mr. WYNN. Thank you, Mr. Chairman.

Mr. CHABOT. Thank you, Mr. Chairman.

Mr. MCCOLLUM. Our third witness on this panel, that I sort of segregated out from the rest because of circumstances, is our colleague, of course, who really doesn't need an introduction to us, but I introduced Steve Chabot to us, so I'm going to introduce you, too, Ed.

Ed Bryant represents the Seventh District of Tennessee. Mr. Bryant served as a captain in the Army JAG General Corp., has taught at the U.S. Military Academy at West Point. He also served as U.S. attorney for the Western District of Tennessee and is a valued member of our subcommittee. And I know you have a good product to talk about with us today, so please proceed, Ed.

STATEMENT OF HON. ED BRYANT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. BRYANT of Tennessee. Thank you, Mr. Chairman. I do appreciate this opportunity to speak before my own subcommittee on behalf of H.R. 1533, a bill that I introduced earlier this year.

H.R. 1533 takes a simple step. It would increase the maximum penalty for escaping from a Federal prison from 5 to 10 years. It simply doubles the penalty for escape from Federal prison.

It's time to raise the stakes for escaping from a Federal prison. Currently, a Federal escapee who is recaptured faces a maximum 5-year penalty. And due to sentencing guidelines, few receive this maximum of 5 years.

There are two reasons for raising the maximum penalty for escape. First, obviously, as a deterrent, and, second, to maintain alignment with today's longer base sentences. First, this legislation would send prisoners a clear message. While the percentage of prison escapees—relative to the increased prison population—has actually dropped, the actual number of escapes has risen, according to Marshals Service data. In 1994, for instance, 660 Federal prisoners escaped. That's more than 50 more than in 1993, and 100 more than in 1992.

Mr. Chairman, the U.S. Marshals Service is responsible for the custody of those who are arrested by Federal law enforcement agencies. Deputy marshals often work with other law enforcement officers to help locate and apprehend these fugitives. And three-fourths of all Federal fugitives returned to custody each year are arrested by the U.S. Marshals Service. Furthermore, the marshals transport Federal prisoners they transfer them between corrections facilities, and protect the Federal judiciary, among other duties.

The Marshals Service has done a good job executing its duties, as has the Bureau of Prisons. This bill is in no way an indictment of their performance. Rather, this legislation is intended to give those convicted of crimes and imprisoned further disincentive to escape or to attempt an escape and risk recapture.

Last year the marshals caught nearly 500 of those 660 escapees. Nevertheless, 160 escaped convicts remained at large—or do remain at large today—to prey upon society. Deputy marshals, corrections personnel, and private citizens are killed or injured in connection with these Federal prison escapes and attempts. This legislation would have deterrent value.

Second, Mr. Chairman, this bill would coordinate the available escape penalty with today's longer base sentences. When the present maximum penalty was set, Federal prisoners seldom received life imprisonment or the death penalty. Federal prisoners now receive longer sentences and, coupled with sentencing guidelines, face a low additional penalty for escape. Raising the maximum penalty available for escape and recapture would bring it in line with the present base sentencing realities.

H.R. 1533 works on behalf of not only the U.S. Marshals and Federal Bureau of Prisons personnel, BOP personnel, but also families, friends, and our constituents who are put at risk from fugitives. In short, this bill would help to make the price of getting caught higher than that of chancing the escape and recapture.

In conclusion, Mr. Chairman, the Department of Justice supports this bill. I trust that this subcommittee will consider this measure and act favorably on it. H.R. 1533 represents another brick in the wall of restoring law and order in America.

Thank you.

[The prepared statement of Mr. Bryant of Tennessee follows:]

PREPARED STATEMENT OF HON. ED BRYANT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. Chairman, I appreciate the opportunity to speak before this subcommittee on behalf of H.R. 1533, a bill I introduced earlier this year.

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First, this legislation would send prisoners a message. While the percentage of prison escapes relative to increased prison population has dropped, the actual number of escapes has risen. In 1994, 660 federal prisons escaped; that's 50 more escapes than in 1993 and 100 more escapes than in 1992.

Mr. Chairman, the United States Marshals Service is responsible for the custody of all those who are arrested by federal law enforcement agencies. Deputy Marshals often work with other law enforcement officers to locate and apprehend fugitives. And three-fourths of all federal fugitives returned to custody each year are arrested by the Marshals Service.

Furthermore, the Marshals Service transports federal prisoners, transfers them between corrections facilities, and protects the federal judiciary, among other duties.

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Last year, the U.S. Marshals caught nearly 500 (497) of those 660 escapees. Nevertheless, 160 escaped convicts remained at large to prey upon society. And Deputy Marshals, corrections personnel, and private citizens are killed or injured each year in connection with federal prisoner escapes. This legislation would have deterrent value.

Second, Mr. Chairman, this bill would coordinate the available escape penalty with today's longer base sentences. When the present maximum penalty was set, federal prisoners seldom received life imprisonment or the death penalty. Federal prisoners now receive longer sentences and, coupled with sentencing guidelines, face a low additional penalty for escape. Raising the maximum penalty available for escape and recapture would bring it in line with present base sentencing realities.

H.R. 1553 works on behalf of not only U.S. Marshals and Bureau of Prisons personnel, but also families, friends, and our constituents, who are put at risk from fugitives. In short, this bill would help to make the price of getting caught higher than that of chancing escape and recapture.

In conclusion, Mr. Chairman, the Department of Justice supports this bill. I trust that the subcommittee will consider this measure and act favorably on it. H.R. 1533 represents another brick in the wall of restoring law and order in America.

Thank you.

Mr. MCCOLLUM. Mr. Bryant, Ed, do you know if the prison system today has internal sanctions that it imposes, especially on those who have escaped when they return to the system beyond, of course, the crime of escape?

Mr. BRYANT of Tennessee. I don't, I don't think that they have that severe of a sanction. I know that they have certain administrative penalties available for certain, I would think, in-house prison violations. But, again, something that would amount to a Federal crime, which an attempt at escape or escape would have to be governed by the sentencing guidelines.

Mr. MCCOLLUM. I haven't asked them, and I'm sure we will later today, but I was reminded because you were JAG in the Army, and I was JAG in the Navy, somebody who escaped from prison, when they got back, they were put in close face cells. I think that whole policy has changed over the years in the military, but they used to put them in a cell that had no windows and slipped the food under the door and keep them there for an interminable time. That was

a pretty big deterrent to escape for the other prisoners, but I think that courts and others have kind of said that we don't do that sort of thing. I don't know that, and I thought I'd ask you.

Last question—and I only have one other one. You gave us the statistics on increased numbers of escapes recently, but there is, according to what was passed to me here, apparently a pretty good decline overall from what was going on in the way of escapes back in 1981, 1982, and 1983. In other words, if you go back 10 years or so, while we may have had a little rise in escapes now in the last couple of years, percentagewise and numberwise it's still quite a bit down. Is that your understanding?

Mr. BRYANT of Tennessee. Well, as I alluded in my statement, that is, in essence, is the case, that actually the percentage has decreased, but the actual numbers have increased. We have actually more in number than we used to have.

I don't know—I would expect that's probably reflective in large part by the better job that we are doing—that our BOP personnel, that our U.S. Marshals who have to move these folks back and forth to trial, they're doing a better job. But what I would like to do is make it even better and try to strive to perfection in this, if we can, and perhaps furnish that missing ingredient here, and that is stiffer sentences because, as I mentioned in my statement, as the Justice Department has mentioned in its recommendation, this has not kept track with the longer base sentences that are there now. Now a person who is in Federal prison with no parole knows he is going to be serving, let's say, 18, 17 years; another realistic 2 to 3 years for an attempt at escape is not much of a deterrent. So, we've got to, I think, fill in the gap here and help put a deterrent there.

Mr. MCCOLLUM. Well, your bill is very straightforward.

I don't have more questions. Maybe, Mr. Schumer, you do?

Mr. SCHUMER. No, I think it's a fine bill. The only thing I'd ask is that you add my name on as a cosponsor and offer that opportunity to other Members on this side of the aisle——

Mr. BRYANT of Tennessee. Certainly.

Mr. SCHUMER. That's certainly an excellent bill.

Mr. MCCOLLUM. Mr. Heineman.

Mr. HEINEMAN. No questions.

Mr. MCCOLLUM. Thank you, Mr. Bryant, for coming and testifying.

Oh, Mr. Conyers is in. I didn't see anybody sitting over there.

Well, I thank you very much for coming today. We're going to move on to our next panel of witnesses at this point.

I don't have a glorious list of accomplishments to give for each person who has come here to testify today. I don't think that somebody got the bios for our panel from the Justice Department, the FBI, and so forth. But, I'm going to introduce you, and if you will come forward, please take your seats.

Kevin Di Gregory, Deputy Assistant General, Criminal Division of the Department of Justice; Thomas R. Kane, Assistant Director for Information, Policy and Public Affairs, the Federal Bureau of Prisons, and Milton—am I pronouncing it right? Ahlerich?

Mr. AHLERICH. Ahlerich, Mr. Chairman.

Mr. MCCOLLUM. Ahlerich, Ahlerich, I'm going to get that right. The Assistant Director of the Federal Bureau of Investigation. I ought to know that, but you and I need to get better acquainted for me to do that properly.

We want to thank all three of you for coming today. Normally, as Mr. Schumer has done in years past, and I have done up until now, is let the public hear a little bit more of your background. We just need to be better at getting that information down here and—but I don't think you have a huge audience today to have to have all that given to. So——

Mr. SCHUMER. Let the record stipulate, Mr. Chairman, they each have excellent and outstanding——

[Laughter.]

Mr. MCCOLLUM. That's fine, we'll concur in that.

I think it would be appropriate, perhaps, to have Mr. Di Gregory start off today with your comments on this legislation.

STATEMENT OF KEVIN Di GREGORY, DEPUTY ASSISTANT ATTORNEY GENERAL, CRIMINAL DIVISION, DEPARTMENT OF JUSTICE, ACCOMPANIED BY THOMAS R. KANE, ASSISTANT DIRECTOR FOR INFORMATION, POLICY AND PUBLIC AFFAIRS, FEDERAL BUREAU OF PRISONS, AND MILTON AHLERICH, ASSISTANT DIRECTOR, FEDERAL BUREAU OF INVESTIGATION

Mr. Di GREGORY. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I'm pleased to appear before you to present the views of the Department of Justice on the bills that the subcommittee is considering today.

As always, the Department is happy to assist the subcommittee in evaluating legislative proposals to further the goals of law enforcement. We have submitted a more detailed statement of our views in a letter to the chairman, and I ask that the letter be included in the hearing record.

[The information follows:]

U. S. Department of Justice

Office of Legislative Affairs

Office of the Assistant Attorney General

Washington, D.C. 20530

September 27, 1995

The Honorable Bill McCollum
Chairman
Subcommittee on Crime and Criminal Justice
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C. 21515

Dear Mr. Chairman:

I am pleased to respond to the Subcommittee's request for the Department of Justice's views on several bills the Subcommittee will soon consider. Our views are provided below.

H.R. 1241 - DNA Identification Grants Improvement Act

The 1994 Crime Bill included the DNA Identification Act of 1994, which contains a $40 million, five-year grant program for the Violent Crime Reduction Trust Fund (VCRTF) for state and local crime laboratories to establish or improve forensic DNA testing capabilities. The Act provides for only $1 million in FY 1996 and $31 million in the last two years, i.e., 1999 and 2000. This flow of funds, if it is left unchanged, will work against the purpose of the grant program, which is to provide funds to jump start the DNA testing programs, thereby taking pressure off the FBI laboratory to provide these services to states.

Early in 1995, you introduced H.R. 1241 to correct this flaw by shifting grant funding authorization forward in the five-year period covered by the Crime Bill. As introduced, the bill also restructured funding for the FBI to carry out responsibilities for operating a national DNA index system and administering the DNA Advisory Board.

The Department of Justice does not support any changes to FBI funding levels under the Act, but still supports changing funding authorization for state grants that would have the effect of making significantly more funds available earlier in the five-year period.

Because the House was unable to act on H.R. 1241 in time to affect the appropriations cycle for FY 1996, the grant levels in the bill for 1997-2000 should be adjusted to reflect the fact

that only $1 million (and not $8 million as stated in the original draft) was appropriated from the VCRTF by the House for state DNA grants in FY 1996. Therefore, the Department recommends that the funding levels in H.R. 1241 be amended as follows:

1. Delete Section 3 pertaining to FBI funding for the DNA Advisory Board and the national DNA index system.

2. Revise the funding levels for state DNA grants as follows:

$1,000,000 for fiscal year 1996
$15,000,000 for fiscal year 1997
$14,000,000 for fiscal year 1998
$6,000,000 for fiscal year 1999
$4,000,000 for fiscal year 2000.

We understand that a substitute for H.R. 1241 making these modifications will be offered. For the foregoing reasons, we support this substitute.

H.R 1533 - Increasing the Penalty for Escaping from a Federal Prison

We support H.R. 1533, a bill that would raise from five years to ten years the maximum statutory penalty prescribed in 18 U.S.C. 751(a) for escape from federal custody after conviction or while awaiting trial on a felony charge. The Department considers any criminal offense committed during the period of an inmate's incarceration to be egregious. In particular, prison escapes and attempted escapes represent a serious correctional security concern for the Bureau of Prisons, as well as a general public safety concern. We agree that the current five year penalty (actually a much shorter period of imprisonment under the sentencing guidelines) seems inadequate to discourage escape attempts by federal prisoners, pending trial or convicted, who are facing lengthy sentences.

The current maximum penalty was set very long ago when federal sentences of life imprisonment or death were not realistic possibilities. Currently, the base offense level guideline range for escapes is only at offense level 13, and an escape involving threat or use of force only enhances that base offense level up to level 18 which allows a 30 to 37 month imprisonment term for a criminal history category II defendant. The sentencing guideline for this offense level does not allow a 60 month (5 year) punishment unless criminal history category V is involved. In Application Note 4 to the escape guideline (§ 2P1.1), the Sentencing Commission suggests the appropriateness of an upward departure if bodily injury or death results. Many federal offenders now face long prison terms due to longer prison terms and elimination of parole. Those offenders are not likely

to find the prospect of an additional three year prison term much deterrence if they are considering an escape. In addition, the small increment currently provided for violence during an escape will have little practical significance to an offender facing a much longer prison term.

Consequently, we find this method of accounting for bodily injury during commission of the crime of escape, by an exception to the normal sentencing procedure, unsatisfactory. Therefore, we also recommend that the legislation direct the Sentencing Commission to significantly increase its guidelines to deter both offenders facing severe federal sentences and violent escapes.

H.R. 1552 - The False Identification Act of 1995

H.R. 1552 would amend title 18, United States Code, regarding false identification documents. The first section of this proposal amends 18 U.S.C. § 1028 by reducing from five to three the number of identification documents the possession of which with intent to use or transfer unlawfully constitutes an offense. This proposal strengthens section 1028 in a meaningful way and we support it.

The second section would enact a new section 1739, chapter 83, title 18, United States Code. This provision would make it a felony to knowingly mail or produce for mailing any "unverified identification document" which bears a birth date purporting to demonstrate that the individual to whom the document pertains is over age 21 when the individual is, in fact, less than 21. "Unverified" means that the mailer has not confirmed the birth date using a certification from either a governmental entity or a physician, hospital or medical clinic. "Identification document" is defined as "a card, certificate, or paper intended to be used primarily to identify an individual."

We believe that it is entirely appropriate for Congress to focus upon the problems presented by the use of false identification documents. Such documents are rife in our society and frequently are used by wrongdoers to facilitate the commission of more serious offenses. However, we must oppose this proposal because it is too broad. Under this bill, an "identification document" is any card intended to be used for identification purposes, not just a card issued by a governmental entity, as in the case of section 1028 of title 18. Thus, an identification card issued by the Elks Club or the Boy Scouts of America, for instance, would be covered. Furthermore, the bill covers any person who mails such a card for any purpose. One could suggest a scenario in which a minor child would request a parent to mail to the child's friend, who had been visiting and returned home, the friend's membership card in the ABC Bicycle Club, which the friend had left behind. If the card identified the child's friend as being over 21 and the parent mailed it, the parent would be in violation of the proposed statute. There is

no reasonable basis on which to impose a duty of inquiry in such a situation, and no such mailing should be a criminal offense.

We would be pleased to work with members of the Subcommittee or staff to assess the specific harms that H.R. 1552 was intended to address and tailor a remedy narrowly drawn to address these harms.

H.R. 2359 - Implementation of the Sentence of Death

H.R. 2359 would allow Federal executions to be carried out at Federal facilities pursuant to uniform Federal regulations. The Department strongly supports this proposal. This position has previously been taken by the Administration and was detailed in the June 13, 1994 letter from the Attorney General to the House and Senate Conference Committee, detailing the Administration's views on various sections of the Violent Crime Control and Law Enforcement Act of 1994 (VCCLEA).

Currently there are six Federal inmates that have been sentenced to death under the 1988 Anti-Drug Abuse Act (21 U.S.C. §848(e)) for murders committed as part of drug-related continuing criminal enterprises. With the passage of the VCCLEA, we anticipate that more prisoners convicted of capital offenses will be committed to the custody of the Attorney General. Federal regulations at 28 CFR Part 26, which became effective in January 1993, stipulate that Federal executions would occur in a Bureau of Prisons facility, under the auspices of the facility's warden and the U.S. Marshals Service. The method of execution would be lethal injection. In accordance with these regulations, the Bureau of Prisons identified the U.S. Penitentiary at Terre Haute for this purpose and recently finished construction of a death row unit and execution facility there.

However, use of the Terre Haute facility for Federal executions is in question because of a little-noted provision in the VCCLEA of 1994. Under the technical language found in the death penalty implementation section, which is now codified as 18 U.S.C. §3596, executions for offenses under the VCCLEA are to be carried out under the supervision of the U.S. Marshals Service in the manner prescribed by the law of the State in which the sentence is imposed. In the case of a State without a death penalty, the court will designate a State with capital punishment and the execution will be carried out in that State, in the manner prescribed by the law of that State. This means that the only executions for offenses under the VCCLEA that could occur at Terre Haute are those for which lethal injection was permissible in the State in which the inmate was convicted.

We believe that it is highly desirable to have a uniform system for implementing Federal death penalties in a Federal institution. From a policy as well as a practical perspective, it makes no sense to burden States with this clearly Federal

responsibility, particularly when the Bureau of Prisons has a facility already built specifically for this task. H.R. 2359 would remedy this situation by amending 18 U.S.C. §3596 to allow for the implementation of Federal death sentences pursuant to Federal regulations promulgated by the Attorney General. In addition, 18 U.S.C. §3597 would be modified to provide for the use of Federal facilities in carrying out Federal executions. As a technical matter, the heading of section 3597 has not been changed in H.R. 2359. The heading, which currently references the use of State facilities, should be amended to read, "Use of Federal Facilities."

The Department also suggests the addition to H.R. 2359 of another necessary modification to the Federal death penalty procedures. The VCCLEA created comprehensive death penalty procedures for Federal crimes. However, the existing death penalty procedures for drug crimes found under 21 U.S.C. §848(g)-(r) were left intact. Repeal of these provisions will remove potential confusion and litigation regarding their application. One exception to our suggestion is found in 21 U.S.C. §848(q)(4)-(10), which creates procedures that are not duplicated as to subject matter in the VCCLEA. Therefore we suggest that these procedures be retained and redesignated as 21 U.S.C. §848(f)(1)-(7) (currently, through a codification error, section 848 has no subsection (f)).

H.R. 2360 - Prisoner Community Service Projects

The Department strongly supports H.R. 2360, which would allow Federal inmates to perform work and provide products for State governments, local governments or private, non-profit organizations. Federal inmates currently perform maintenance and clean-up work for various Federal entities such as the National Park Service. This bill would give the Bureau of Prisons the flexibility to develop agreements with non-Federal governmental entities or private, non-profit groups to provide inmate labor for community service projects.

H.R. 2360 would also allow Federal inmates to produce minimum-cost products made from scrap materials and to donate these products to State governments, local governments, or charitable organizations. Examples of such products include wooden or cloth toys that could be given to charitable agencies assisting underprivileged or institutionalized children.

The Bureau of Prisons continues to look for additional work opportunities in order to reduce inmate idleness and to keep inmates constructively occupied in meaningful work programs that teach marketable skills, instill good work habits and prepare inmates for a productive life upon release from prison. This proposal would create such an opportunity to put more inmates to work without unduly impacting the private sector.

Again, we are pleased to assist the Subcommittee's consideration of these bills. Please do not hesitate to contact me if you need any additional assistance.

Sincerely,

Andrew Fois

Andrew Fois
Assistant Attorney General

cc: The Honorable Charles Schumer
Ranking Minority Member

Mr. DI GREGORY. With me are Tom Kane, Assistant Director of the Bureau of Prisons, and Milton Ahlerich, Assistant Director of the Crime Labs of the FBI. They will assist me in answering any questions you may have at the conclusion of my statement.

First, I'd like to talk about the DNA Identification Grants Improvement Act. The 1994 crime bill included the DNA Identification Act of 1994 which contains a $40 million, 5-year grant program in the Violent Crime Reduction Trust Fund for State and local crime laboratories to establish or improve forensic DNA testing capabilities. The act provides for only $1 million in fiscal year 1996 and $31 million in the last 2 years, 1999 and the year 2000. This flow of funds, if it is left unchanged, will work against the purpose of the grant program which is to provide funds to jump start the DNA testing programs, thereby taking pressure off the FBI laboratory to provide these services to States.

Early in 1995, you introduced H.R. 1241 to correct this flaw by shifting grant funding authorization forward in the 5-year period covered by the crime bill. As introduced, the bill also restructured funding for the FBI to carry out responsibilities for operating a national DNA index system and administering the DNA Advisory Board.

The Department of Justice does not support any changes to FBI funding levels under the act, but still supports changing funding authorization for State grants that would have the effect of making significantly more funds available earlier in the 5-year period.

Because the House was unable to act on the H.R. 1241 in time to effect the appropriations cycle for fiscal year 1996, the grant levels in the bill for 1997 to the year 2000 should be adjusted to reflect the fact, we think, that only $1 million, and not $8 million as stated in the original draft, was appropriated from the Violent Crime Reduction Trust Fund by the House for State DNA grants for fiscal year 1996. Therefore, we recommend that the funding levels in H.R. 1241 be amended as detailed in our letter to the chairman.

We understand that the substitute—and you noted it today in your statement, Mr. Chairman—for 1241 making these modifications will be offered and for the foregoing reasons.

Mr. MCCOLLUM. That's correct.

Mr. DI GREGORY. Secondly, I'd like to address the bill which was introduced which would increase the penalty for escaping from a Federal prison. We support this bill, the bill that would raise from 5 years to 10 years the maximum statutory penalty prescribed in 18 U.S. Code 751, subsection A, for escape from Federal custody after conviction or while awaiting trial on a felony charge.

The Department considers any criminal offense during the period of an inmate's incarceration to be an egregious one. In particular, prison escapes and attempted escapes represent a serious correctional security concern for the Bureau of Prisons as well as a general public safety concern. We agree that the current 5-year penalty seems inadequate to discourage escape attempts by Federal prisoners pending trial or conviction, especially those who are facing lengthy sentences.

Next, I'll turn to the False Identification Act of 1995. H.R. 1552 would amend title 18 regarding false identification documents. The

first section amends 18 U.S. Code 1028 by reducing from five to three the number of ID documents the possession of which the intention to use or transfer unlawfully constitutes an offense. This proposal strengthens 1028 in a meaningful way, and we are in support of it.

The second section would enact a new section 1739, chapter 39, title 18, U.S. Code. This provision would make it a felony to knowingly mail or produce for mailing any unverified identification document which bears a birth date purporting to demonstrate that the individual to whom the document pertains is over age 21 when the individual is, in fact, less than 21 years of age.

We believe that it is entirely appropriate for Congress to focus on the problems presented by the use of false identification documents. However, we oppose this specific proposal because it's too broad. Under the bill an identification document is defined as "any card intended to be used for identification purposes" and not just a card created by or issued by a governmental entity as in the case of section 1028 of title 18. Thus, an identification card, as Mr. Schumer pointed out earlier, perhaps issued by the Boy Scouts of America, would be covered under the proposed legislation.

We would be pleased to work with the subcommittee to assess the specific harms that H.R. 1552 is intended to address and to tailor, along with the subcommittee, a narrow remedy to address these harms.

Next, I'll turn my attention to H.R. 2359, implementation of the sentence of death.

H.R. 2359 would allow Federal executions to be carried out at Federal facilities pursuant to uniform Federal regulations. The Department strongly supports this proposal. Federal regulations at 28 CFR, part 26, which became effective in January 1993, stipulate that Federal executions would occur in a Bureau of Prisons facility under the auspices of the facilities' warden and the U.S. Marshals Service. The method of execution would be lethal injection. In accordance with these regulations, the Bureau of Prisons identified the U.S. penitentiary at Terre Haute for this purpose and recently finished construction of a death row unit and execution facility there.

However, use of the Terre Haute facility for Federal executions is in question because of a little noted provision in the 1994 Crime Act. Under the technical language found in a death penalty implementation, which is now codified at 18 U.S. Code 3596, executions for offenses under the 1994 Crime Act are to carried out under supervision of the U.S. Marshals Service in the manner prescribed by the law of the State in which the sentence is imposed. In the case of a State without the death penalty, that section provides that the court will designate a State with capital punishment, and the execution will be carried out in that State in the manner prescribed by the particular law of that State. This means that the only execution for offenses under the 1994 Crime Act that could occur at Terre Haute are those for which lethal injection was permissible in the State in which the inmate was convicted. We believe that it is highly desirable to have a uniform system for implementing Federal death penalties in a Federal institution.

From a policy as well as practical perspective, it seems to make no sense to burden States with this clearly Federal responsibility, particularly when the Bureau of Prisons has a facility already built specifically for this task. H.R. 2359 would remedy this situation by amending 18 U.S. Code 3596 to allow for the implementation of Federal death sentences pursuant to Federal regulations promulgated by the Attorney General. In addition, 18 U.S. Code 3597 would be modified for the—to provide for the use of Federal facilities in carrying out executions.

I'll next turn my attention to H.R. 2360, Prisoner Community Service Projects. The Department strongly supports H.R. 2360 which would allow Federal inmates to perform work and provide products for State governments, local governments, or private nonprofit organizations. Federal inmates currently perform maintenance and cleanup work for various Federal entities such as the National Park Service. This bill would give the Bureau of Prisons the flexibility to develop agreements with non-Federal Government entities or private nonprofit groups to provide inmate labor for community service projects. H.R. 2360 would also permit Federal inmates to produce minimal cost products made from scrap materials and to donate these products to State governments, local governments, or charitable organizations. Examples of such products include wooden or cloth toys that could be given to charitable agencies assisting underprivileged or institutional children.

The Bureau of Prisons continues to look for additional work opportunities in order to reduce inmate idleness and to keep inmates constructively occupied in meaningful work programs that teach marketable skills and instill good work habits and prepare inmates for a productive life upon release from prison. This proposal would create such an opportunity to put more inmates to work without unduly impacting the private sector.

Again, the Department of Justice is pleased to assist the subcommittee's consideration of these bills, and we would be happy to answer any questions you may have.

Mr. MCCOLLUM. Thank you very much, Mr. Di Gregory. I gather that you're making the statement, and Mr. Kane and Mr. Ahlerich, if you have statements, you are welcome to make them, do you wish to?

Mr. KANE. I have none, Mr. Chairman. Thank you.

Mr. AHLERICH. Nor do I, Mr. Chairman.

Mr. MCCOLLUM. Thank you.

Well, I have a couple of questions to ask, and I'm sure my colleagues do as well, about some of these bills at least so we can have a better understanding of them.

With regard to the last bill, the prison bill with regard to these products that are being produced—and I don't know whose the best to answer, maybe Mr. Kane or Mr. Di Gregory. I'm very curious as to whether you expect these services that are being provided by the inmates will diminish in any way wages or benefits earned by the recipient organizations. I think it needs to be very clear as to whether you think they would and why they wouldn't, if they wouldn't.

Mr. KANE. Absolutely not, Mr. Chairman. We expect that the implementing regulations that will follow from this legislation would

clearly specify that any program to be considered by an institution to involve inmates on behalf of a non-Federal or private nonprofit should not in any way undercut the opportunity for civilian workers to obtain employment if it were otherwise available to do this kind of work. The idea is that we would supply primarily maintenance and cleanup sort of labor to non-Federal governments, private nonprofits, that would otherwise not be done.

Mr. MCCOLLUM. Fair enough. I just want to make sure the record's clearly put to rest on that point because it's often raised with us when we start dealing with prison-made goods.

My understanding also is that this is going to be made from waste or scrap materials, and is it true that these materials would be just thrown away?

Mr. KANE. That is true, Mr. Chairman. The sort of donated goods, as it were, that Mr. Di Gregory referred to—the examples of toys for children who are infirm or institutionalized would be made from scraps that otherwise are thrown away, and typically there are textile scraps and wood scraps that are Federal prison industry's byproducts that could be used to do this. We simply do not have the authority to——

Mr. MCCOLLUM. Do you know if any toy manufacturers or retailers are concerned about this proposal?

Mr. KANE. Well, again, we believe we would be producing products of minimal value that also would not otherwise be available to these children.

Mr. MCCOLLUM. But nobody's come to you since this has been floating around in bill form or otherwise that we think this is a horrible idea or something, I gather? You haven't had any knocking on your door?

Mr. KANE. We are aware of no one.

Mr. MCCOLLUM. OK.

Mr. KANE.

Thank you, Mr. Chairman.

Mr. MCCOLLUM. And the last question in this area, you've got a prohibition from reselling these donated goods by the recipient organization, and I'm just curious whether that's workable.

Mr. KANE. I'm sorry.

Mr. MCCOLLUM. You've got a prohibition on the recipient from reselling these products. Is that really workable? Can you effectively prohibit that or is that just something we would like to prohibit?

Mr. KANE. It's something that we certainly intend to prohibit, and we have not attempted to design implementation strategies at this point to actually prohibit, and if you wish, we could submit something for the record.

Mr. MCCOLLUM. I would appreciate that.

[The information follows:]

The Bureau of Prisons has not as yet finalized implementation strategies designed to prohibit organizations that would receive donated goods from reselling them. However, when such strategies are developed, we will fully inform the Subcommittee.

Mr. MCCOLLUM. Mr. Ahlerich, I think maybe I should ask you these questions about DNA. I think we ought to put on the record whose going to be eligible for these DNA grants that are there and

what the States think about this effort to change the funding. Would you do that please?

Mr. AHLERICH. Yes. Municipal and State laboratories would be eligible to receive the grants, as it's envisioned right now. States, as you may know, have done a good job over the last several years of coming online with convicted offender statutes with 40 States passing convicted offender statutes which allow for the collection of DNA sample from convicted offenders. This system, as you know, Mr. Chairman and members of the subcommittee, is designed to allow for placing convicted offenders' DNA profile on record and then at later time evidence from crime scenes being run against a data base and giving assistance to those investigators. We are starting to recognize success. The plan as it was envisioned we really didn't know that it would work, but we now know that it does. We have recorded 29 instances where associations have occurred through the database—several occurring in your State, Mr. Chairman—as a result of eight of your laboratories participating in the CODIS program.

DNA testing is expensive and to develop the capabilities, we need the seed money moved towards the front of the time frame instead of the back of the time frame to get the seed money in place, so that the State's can do what they need.

Mr. MCCOLLUM. And, obviously, the States do support this, I gather?

Mr. AHLERICH. They strongly support it. I maintain a close association with the American Society of Crime Lab Directors; they are here in town in Quantico this week, and I know that they feel very strongly about this and the need for some assistance, and some grants will allow us to jump start the program.

Mr. MCCOLLUM. Well, I know that you are very excited, your agency is—the Justice Department—about the DNA prospects in this whole area, and therefore, we are, too. It's a very fascinating and very critical development.

I've had my time expire. I'll see if Mr. Schumer has some questions.

Mr. SCHUMER. Yes, thank you, Mr. Chairman, and I am in agreement with your memo on these bills. But I did have one question—one question on the death penalty statute—which, as you know, I support and helped write in 1994. What would be the envisioned time horizon, when would the prisoner be transferred to Terre Haute? Would that be after every appeal?

Mr. DI GREGORY. I, I——

Mr. SCHUMER. How does that work? I come from a State where we haven't had a death penalty, so I am not familiar with when the transfer occurs. Our State has chosen one place as well, so the idea of having it in every Federal penitentiary doesn't make any sense. But, on the other hand, I am concerned about the access to counsel, the ability to be with loved ones, and all of these other things. And so, the first question I have is, when does the transfer occur from whatever facility the prisoner is in to go to Terre Haute?

Mr. KANE. Thank you, Congressman Schumer. The—I'm afraid I'm not going to be able to give you a clear and concise answer at

this point, primarily because we haven't opened the death row at Terre Haute as yet.

Mr. SCHUMER. Well, what happens in States that have had a capital punishment statute?

Mr. DI GREGORY. I can only speak to what happens in Florida because I was a prosecutor there, Congressman.

Mr. SCHUMER. OK.

Mr. DI GREGORY. In Florida, all of the inmates who are sentenced to death are transported immediately—well, not immediately; they are usually left in the county jail facility. Their counsel will have an opportunity to perfect a motion for a new trial and notice of appeal. But they are sent directly to the Florida State prison at Stark——

Mr. SCHUMER. Is there just one maximum——

Mr. DI GREGORY. There's not—there are more than one maximum security prisons in the State, but that particular prison is designated as——

Mr. SCHUMER. So once conviction at the trial level occurs they all go there?

Mr. DI GREGORY. That's correct.

Mr. SCHUMER. And where is Stark?

Mr. DI GREGORY. Stark is near—somewhere between Tallahassee and Gainesville. Congressman McCollum may know better——

Mr. MCCOLLUM. It's actually to the east toward Jacksonville from Gainesville. It's kind of out in the middle of nowhere.

Mr. SCHUMER. OK, so how do they deal with that issue then? Let's say the prisoner comes from Miami, the crime was in Miami, the trial was in Miami, the attorney is in Miami, the family is in Miami. The attorney has to travel to Stark——

Mr. DI GREGORY. To the best of my knowledge, yes, sir.

Mr. SCHUMER. Which is what, a 5- or 6-hour car ride, I would guess.

Mr. DI GREGORY. Probably a little longer from Miami. I think more like about 7 hours.

Mr. SCHUMER. So I guess my question then is, Mr. Di Gregory or Mr. Kane, obviously, when you have a national situation it's a little different. It's not even a 1-day car ride, but a plane ride and everything else. How do you expect to deal with the issue of counsel—I mean these appeals even with the tightening up of the habeas corpus procedure will go on for a long period of time. You expect there to be just the whole bar that will come in Terre Haute, a new bunch of lawyers, and the prisoner will have to get a new lawyer in Terre Haute? How does it all work? And what about families and things like that?

Mr. KANE. Again, Mr. Schumer, we are, as you are, very concerned with not only the security of the death row, but also the humane and dignified treatment of these offenders, including access to their families; we know that's important. And we chose the Terre Haute location because of it's central geographic location in the country. And we will have to balance as we open a unit those issues of access with cost efficiency.

Perhaps under certain circumstances we could contract with the State near the court of jurisdiction where appeals are being processed if the State has a death row. A unifying principle here for

us would be that these offenders be maintained on a death row. If there is no State nearer Terre Haute with a death row, then presumably——

Mr. SCHUMER. Well, that's easy, but most States do now have them. Again, I think the legislation makes eminent sense. I think it was inadvertent to let each State—you know let the Federal Government follow what went on in each State. That doesn't make much sense. And so the concept of having one unified procedure makes a good deal of sense to me, but having one death row may be difficult.

And I would ask Mr. Chairman, that the Department of Justice submit within a week maybe—at least a week before we mark up the bill, whenever that will be, some writing on what thought has gone into this and how you expect to deal with these questions.

Mr. MCCOLLUM. Well, I would certainly concur in making that request. We would like to mark this bill up—all of these bills up—fairly soon after we get back from this recess. We will be out for most next week, if not for all of it. So the earlier you can give us a memo on this the better.

[See appendix.]

Mr. MCCOLLUM. Mr. Heineman.

Mr. HEINEMAN. Thank you, Mr. Chairman, and welcome.

The bill before us has to deal with the funding of DNA, but it doesn't have any details in there, and I'm a firm believer in DNA, I think it's one of the best processes and procedures we've had since we've refined the fingerprints and kept files on fingerprints. Has there been any challenge to the constitutionality of filing DNA identification?

Mr. AHLERICH. Yes, there's been a challenge in Virginia of one individual who challenged us on the basis of fourth amendment issues. This was heard in Federal court and was upheld at the court of appeals level.

Mr. HEINEMAN. What was upheld, the challenge or the law?

Mr. AHLERICH. The law was upheld.

Mr. HEINEMAN. Was that a nontestimonial or was that just the filing and keeping——

Mr. AHLERICH. It dealt with the issue of collection of the blood. The privacy issue and the intrusive nature of the collection of the blood from the convicted offender was the basis of the appeal. And it was upheld, the law was upheld.

Mr. HEINEMAN. The purpose of collection was merely for future identification?

Mr. AHLERICH. That's correct, the idea is—40 States have passed these convicted offender laws. For violent criminals and certainly sex offenders, after conviction a court order is given as a matter of routine, a profile is developed from that, and that is turned into computer language and put on file for future reference.

Mr. HEINEMAN. Something which I'm fully in favor of. Is there a quick turnaround on DNA? Somewhere earlier in the year, I heard they had a process now that could turn DNA around in 2 weeks.

Mr. AHLERICH. The technologies are—there are different types of DNA analysis, as you may know. The most discriminating is the RFLP-based which takes several weeks for this to be completed.

There are newer technologies that are coming online, and you are correct, that are faster. They are not as robust, they are not quite as accurate, but they are faster. We are developing these technologies and putting them online in the FBI laboratory, they are being put online in municipal laboratories in certain places, and they've been used abroad also, sir.

Mr. HEINEMAN. When you say "not quite as accurate," I didn't know as it relates to DNA that there was a degree of accuracy.

Mr. AHLERICH. There is. It's a statistical probability. And I am not a scientist, so forgive me, but I will take this as far as I can. The best or most reliable and the one that gives the highest definition of precise statistical prediction is the RFLP. The PCR-based types are less discriminating but, nonetheless, very reliable, extremely reliable. We're talking one in thousands versus with RFLP one in millions and sometimes billions.

Mr. HEINEMAN. OK, that basically would be used as a disqualifier at some point?

Mr. AHLERICH. That's correct. Or a pointer to develop a suspect that would then allow us to test further and go deeper and get more precision from tests.

Mr. HEINEMAN. This funding that you're seeking and will get, I assume, how is that used? As R&D?

Mr. AHLERICH. No. This is for grant money that would be administered by the Department's NIJ. And it's used to assist the States in their development of their DNA testing capability, not for hiring new employees, but rather for training the employees they have, renovation of their space and other improvements to bring the testing on line. We currently have 200 forensic laboratories in the United States that do either DNA or serology work. Ninety to one hundred of them are doing DNA work. They all want to do it in most instances. It's an expensive technology. We have tried to play a leading role in that we have trained 460 individuals over the last several years from State and local laboratories to be able to carry out DNA work, but we can't carry the workload on our own and there are other trained facilities, that cost money, quite frankly, that the States need.

Mr. HEINEMAN. Thank you. I yield back my time.

Mr. MCCOLLUM. Thank you, Mr. Heineman.

Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman.

On the DNA, you mentioned the different technologies. If Virginia had its profiles computerized and another State had used a different technology, are they——

Mr. AHLERICH. Compatible?

Mr. SCOTT. Compatible, yes.

Mr. AHLERICH. They are, Mr. Scott. The CODIS, the index system that's being built, will allow for that. While different methods are being used, still the computers can take this into account. Programs can be built—are being designed—that will allow for different technologies, and we can still test through the central bases.

Mr. SCOTT. Everybody's going to be compatible?

Mr. AHLERICH. Yes.

Mr. SCOTT. Everybody is compatible right now?

Mr. AHLERICH. They are. We are not on the national system yet. There's three levels to this, the municipal, the State, and then the national. We are operating on a municipal basis and on a statewide basis. For instance, Florida throughout the State laboratories can be checked. But the national level is expected to be turned on, at least tested within 6 months.

Mr. SCOTT. I know you mentioned Virginia. Last time I checked, which was a couple of years ago when I was in the legislature, we were drawing the blood, but didn't have enough money to actually do the tests and the profile. So if you had a suspect, you could check out the suspects by going back to the blood. And once a profile was put in the computer, you wouldn't use that as evidence; you would use that as probable cause to have a new test taken and then you would compare the new test to the evidence, and that way you wouldn't get caught up in the chain of custody with all the——

Mr. AHLERICH. No charges are filed strictly on a computer match, but rather there has to be further expert analysis—scientific analysis.

Mr. SCOTT. Of the new blood. And I would assume that—could this money be used to help Virginia to convert the stored blood that hasn't been tested?

Mr. AHLERICH. Indeed, it could through the training of their employees, training new employees. But it will not pay—it's not envisioned to pay salaries or to build new facilities.

Mr. SCOTT. Not equipment?

Mr. AHLERICH. Yes, equipment, supplies, and training and renovation of current space is envisioned by the grants.

Mr. SCOTT. OK, let me move to another bill, on the escapee bill. The evidence we have wasn't quite consistent with the numbers that Mr. Bryant gave. I've got different numbers. How many escapees do we have—I've got 1994, one escapee from inside a secure facility. Is that accurate?

Mr. KANE. Congressman Scott, that is accurate.

Mr. SCOTT. And of the guys that escaped from the essentially unsecure facilities, how many of them committed crimes?

Mr. KANE. While on escaped status?

Mr. SCOTT. Right.

Mr. KANE. I'm sorry, I don't have data on that with me. Mr. Di Gregory. No.

Mr. SCOTT. If they did not commit any crimes on escaped status, then there wouldn't be much point in the bill because you are adding 5 additional years of expense, in addition to when you catch them they've got to serve whatever they escaped from. If they are not committing any more crimes, then there's no point to the bill. If they are committing a lot of crimes, then there is a point to the bill. So we would like to know essentially what we'd be getting for the additional money we'd be spending in terms of crime reduction. So if you can get those numbers.

[The information follows:]

In 1994, the number of walkways (escapes) from the Bureau of Prisons nonsecure facilities was 211.

Mr. SCOTT. On the ID bill, the bill says that whoever knowingly sends through the mails. Is "the mails" a term of art so we know what we're talking about?

Mr. DI GREGORY. I assume that the bill meant United States mail, as opposed——

Mr. SCOTT. We need to make that clear.

Mr. DI GREGORY. But one of the things that could be added to the bills, consistent with the amendments to the mail fraud statutes that were made in last year's crime bill, would be to include private carriers like Federal Express.

Mr. SCOTT. OK, and on the death penalty bill, in State death penalty cases 40 percent are subsequently overturned for various reasons. Do we have any evidence on how many federally-imposed death penalties are overturned on appeal?

Mr. DI GREGORY. I don't have anything for you at this time, Congressman.

Mr. SCOTT. If it's anywhere close to that, then I think that the questions that the gentleman from New York asked would be extremely important, because if you've got people who are in fact innocent or wrongfully sentenced or improperly sentence, you've created an impossible situation by forcing them to—Mr. Chairman, if I could ask just one more question?

Mr. MCCOLLUM. Go ahead, Mr. Scott.

Mr. SCOTT. Are you suggesting that there's deterrent effect to the death penalty? Because moving people to a State—because having somebody put to death in Indiana isn't going to have deterrent effect on somebody committing a crime in Virginia. So, you're not suggesting that's there's any deterrent effect in the death penalty, are you?

Mr. DI GREGORY. I'm just suggesting that a more uniform method, the Federal death penalty, is desirable from the Department's point of view.

Mr. SCOTT. But not for the purposes of preventing crime.

Thank you, Mr. Chairman.

Mr. MCCOLLUM. Mr. Bryant, you're recognized for 5 minutes.

Mr. BRYANT of Tennessee. Thank you, Mr. Chairman.

Mr. Scott brings up a good issue in terms of the numbers, and I will check into that, but let me bring up a point he just raised regarding the death penalty. I'm one of those who believes that the death penalty does serve as a deterrent for people from committing murder, crimes like that. Not everyone will be deterred—just as going to jail does not deter everyone from committing crime, because our jails are full of people who were not deterred, but it does deter some people, and I think the death penalty would deter some people who might be contemplating committing murder.

Mr. Di Gregory, does the fact that—let's say someone commits a Federal capital offense in Florida, and he is tried and convicted, and he goes through the appeals process and then ultimately would go to Indiana to have the actual sentence enforced. If one believes that the death penalty is a deterrent, would the mere fact that he is actually executed in Indiana make any difference to the deterrent effect you'd have in Florida with, I'm sure, the media coverage that had preceded the death penalty as well the media coverage that would cover that? Is there any relationship between the fact that he's executed one place in this deterrent equation?

Mr. DI GREGORY. I—that's a difficult question to answer. I honestly don't know whether there is or there isn't, Congressman.

Mr. BRYANT of Tennessee. Would the fact that there would be media coverage of the death penalty—maybe CNN and whatever else, maybe live coverage—maybe not live coverage, but—beamed back to the State. I'm not sure that I see the connection that you merely move someone to a central location for a uniform procedure of execution, and how that would play back into this equation of deterrence back in the home State. I'm not sure I follow that. And I'm not sure I'm making myself clear to you. But is there any connection to that argument Mr. Scott makes? Do you see any validity to that argument that he makes?

Mr. DI GREGORY. I don't, I don't—I'm really not here to comment on the validity of one person's argument—on one Congressperson's arguments or another. And I hope you will allow me to simply pass on that one, and say to you what I said to Congressman Scott, that the reason that we think that this is desirable legislation is that it will make uniform the manner in which capital punishment is implemented by the Federal Government. As the law stands right now, someone convicted under title 18 of a capital offense is subject to the provision that I mentioned earlier that is currently on the books, which would subject them to the method of execution in the State in which they were convicted. And someone who is convicted under title 21 is subject to the Federal regulations which call for lethal injection. And it may be that we will have someone convicted in a State where there is another method of execution other than lethal injection. We think that uniformity would be desirable.

Mr. BRYANT of Tennessee. Thank you.

Mr. Kane, you're with the DOJ. I take it that you support this concept of unification?

Mr. KANE. Absolutely, Mr. Bryant.

Mr. BRYANT of Tennessee. Now Congressman Schumer brought up a very good point, I thought, in terms of working out the details. Could this possibly be extended to maybe regional locations beyond the one in Indiana, if that truly becomes a problem—if you could go to maybe two or three additional regional locations where the death penalty could be implemented?

Mr. KANE. It would be very costly to do that, sir.

Mr. BRYANT of Tennessee. And I take it, Mr. Ahlerich, that the BOP supports all of these bills that we're talking about today?

Mr. AHLERICH. The FBI certainly does, sir, yes.

Mr. BRYANT of Tennessee. You're the FBI?

Mr. AHLERICH. Yes, sir, I am.

Mr. BRYANT of Tennessee. Oh, I'm sorry, I've got you down for the Bureau of Prisons on our list.

Mr. AHLERICH. That's all right; they're a fine organization.

Mr. BRYANT of Tennessee. Thank all of you for coming today.

Mr. Chairman, I yield back the balance of my time.

Mr. MCCOLLUM. Thank you, Mr. Bryant.

Mr. Watt, you're recognized for 5 minutes.

Mr. WATT. Thank you, Mr. Chairman. I'm going to spend all my time with Mr. Ahlerich here. I'm not sure I'm pronouncing your name right. Is it——

Mr. AHLERICH. It's Ahlerich, sir.

Mr. WATT. Ahlerich. On this DNA bill, you may recall that I was one of two or three Members of Congress the last time who voted

against upgrading and expanding the CODIS system. I've trying to get my conservative colleagues who keep saying they are more conservative then me to come to the understanding that this is the ultimate example of Big Brother. When we take somebody's blood, and we put it in a central storage bank and we analyze it, it's even beyond fingerprints. Because, as I understand it, I have on me one set of fingerprints, and I'm the only person in the world that has that. But this is a statistical analysis. It's really not an individual analysis. So, I'm very troubled by a government doing this, particularly in cases like the one you said had been tested in court, even though the courts upheld what was being done—where a person who just happens to be in jail for some offense gets his blood taken from him and put into a bank unconnected to that particular offense. And so I want to ask a couple of very pointed questions about some concerns that I have along this line.

First of all, at the time that we voted on this issue—expansion of the CODIS system and upgrading it—the last time the Federal Government really had no standards or criteria for what was an acceptable DNA testing process. Do we have any standards or criteria now by which we measure whether this stuff we're getting is reliable?

Mr. AHLERICH. Yes, we do. The laboratories that have participated in DNA profiling—the FBI taking the lead and certain other States—most other States—have banded together in a working group over the years to develop a standard——

Mr. WATT. I won't ask you to tell me what the standards are now because we've got only 5 minutes, but I would love to have the written standards that have been developed in this area. I think this is critically important if we are going to have this system—which I don't think we ought to have—that we at least have some specific standards by which we are measuring the reliability. And if you could give me in writing——

Mr. AHLERICH. Two quick answers to that. The interim standards that were adopted and put into the law and recognized by the Congress were the technical working group on DNA which dealt basically with quality assurance issues in terms of the amount of training, proficiency testing, general quality of laboratory procedures. The Congress also gave the standard-setting authority to the Director of the FBI who will be advised by an advisory board who has—that has been appointed by the Director of the FBI in March of this year, chaired by Dr. Joshua Lederberg, a Nobel prize-winning scientist.

Mr. WATT. I don't want to cut you off because I want this information, but you're not going to be able to give me—I'd love to see the process by which you got to the standards—which is what you're talking about—and the standards, if I can, in writing.

Mr. AHLERICH. I'd be happy to supply that.

[The information follows:]

10/6/95

RESPONSES TO CONGRESSMAN WATT'S QUESTIONS DURING FBI TESTIMONY BEFORE THE HOUSE SUBCOMMITTEE ON CRIME OF THE HOUSE JUDICIARY COMMITTEE ON SEPTEMBER 28, 1995

1. Please provide the current written standards for acceptance of data into the FBI's Combined DNA Index System (CODIS) and the current written standards for DNA testing in the forensic crime laboratory community.

Response: Attached for your review are the written standards for accepting data into CODIS, and also the written standards used by the forensic laboratory community for DNA testing. These later standards have been designated the interim standards by Congress until the FBI Director's DNA Advisory Board, which was established by Congress in the 1994 Crime Bill, advises the Director on a revised set of standards for use in DNA testing.

2. Can the FBI Laboratory provide assurances that the FBI is not working to develop a "profile" of a criminal, or who might be capable of criminal activity, based upon genetic information contained in DNA profiles of convicted offenders in CODIS?

Response: Yes. The DNA profiles in CODIS are used only for the specific purpose of identifying an individual. This identification is used only to include or exclude a person as a suspect in a crime, based on a DNA match, or the lack of a match. The FBI is not now, and will not in the future, develop a profile of a criminal based on genetic information from DNA samples in CODIS.

Approved: 

Milton E. Ahlerich
Assistant Director
Laboratory Division

CODIS

STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA

DRAFT – January 29. 1996

Send comments to Dr Barry Brown. Room 3658. Tenth Street Northwest. Washington. D C. 20535. (202) 324-1337. FAX 202-324-1276

Table of Contents

Definitions

Allele - Operationally, one of several variable number of tandem repeat DNA sequences which may be found at a given locus. An allele is described by the approximate number of base pairs it contains.

Alternative Image Analysis Work Station - An image analysis work station that uses software developed by an organization, company, or individual other than the FBI.

Amplification - Increasing the number of copies of a desired DNA sequence.

Amplification Blank - A control that consists of only amplification reagents without the addition of sample DNA. This control is used to detect DNA contamination of the amplification reagents and materials.

Analytical Electrophoretic gel type - Analytical electrophoretic gel type is defined by the category of specimens that are loaded onto the gel. These classes are population, forensic, convicted offender and missing persons. Examples: population analytical electrophoretic gel type - only population specimens are on the analytical gel; population/convicted offender analytical electrophoretic gel type (mix category example) - one or more population and convicted offender specimens are on the analytical gel.

Autoradiogram - An image produced on a piece of film by radioactive or chemiluminescent material.

CODIS - Originally, the COmbined DNA Index System, it now refers to the national DNA identification index. CODIS contains four separate files or indexes: population, forensic, convicted offender and missing persons. The DNA profiles in CODIS are used for law enforcement purposes only, and access is limited to public law enforcement DNA crime laboratories. CODIS facilitates comparisons of DNA records to generate investigative leads. It also functions as a national repository for population DNA records, of use in accessing the statistical significance of a forensic DNA match.

CODIS comparisons - Comparisons of one DNA record to another for the purpose of establishing an association between two specimens.

CODIS Check Sample - A DNA sample, in the form of a body fluid stain, that produces known restriction patterns of one or more alleles at each locus supported by CODIS. The fragment sizes of these alleles will not be disclosed to the DNA analyst. The patterns derived from the CODIS Check Sample are compared with expected patterns to evaluate the acceptability of the analytical results from a CODIS subscriber for inclusion in CODIS files.

CODIS protocol - The DNA analysis procedure used to perform DNA profiling in a CODIS subscribing laboratory. It is a method that produces reliable and CODIS compatible DNA results.

CODIS subscriber - Any federal, state, or local public forensic DNA analysis laboratory conducting DNA identification analysis for law enforcement purposes and which has access to CODIS. CODIS access can include adding, changing, deleting, and using DNA identification records

Convicted offender - See offender

Convicted offender file - See offender file

Convicted offender sample - See offender sample

Cycle - The PCR cycle consists of three steps: 1) Denaturation of the template, 2) Annealing of primers to complementary sequences at an empirically determined temperature and 3) Extension of bound primers by a DNA polymerase

DNA Contamination - The unintentional introduction of exogenous DNA into a DNA sample or PCR reaction prior to amplification

DNA Record - The numerical representation of a DNA profile that is in a form suitable for computer storage, processing, and retrieval

Extension - The covalent linkage of deoxyribonucleoside triphosphates in a template-directed manner by DNA polymerase. Linkage is in a 5' to 3' direction starting from the 3' end of bound primers. PCR primers are extended one nucleotide at a time by a DNA polymerase during each PCR cycle

Forensic file - The CODIS file (or index) that contains the DNA results from the analysis of crime scene body fluid stains. The DNA records contained in this file originate from cases with suspects and from cases without suspects. This file is searched to establish a link between two or more cases on file

Forensic sample - A body fluid stain or body part that is found at the scene of a crime. DNA analysis is conducted to establish an association between the crime scene and an individual, normally a perpetrator. DNA profiles developed from separate crime scenes are compared to identify cases perpetrated by a serial offender

Hybridization - The process of complementary base pairing between two single strands of DNA and/or RNA

Image Analysis Work Station - The computer assisted image capture and processing system used in the interpretation of DNA profiles

Human DNA control - A specimen from a single human source analyzed concurrently with other DNA specimens. The patterns derived from the human DNA control are compared at local, state, and national CODIS levels with expected patterns to evaluate the acceptability of the results for inclusion in CODIS files.

Kilobase (kb) - Unit of 1,000 base pairs of DNA or 1000 bases of RNA.

Laboratory - See CODIS subscriber.

Locus - A location in the human genome revealed by the application of a specific probe. Loci supported by CODIS are polymorphic, and hence of value in forensic identification.

Missing Person file - The CODIS file (or index) that contains the DNA results from the analysis of body parts, blood of a living or deceased person whose identity is unknown, blood or other tissues from the missing person collected prior to their disappearance, and close biological relatives of missing persons. The DNA record from the missing person is searched against the DNA results from missing persons prior to their disappearance, when available. Alternatively, the DNA record from the missing person is searched against the DNA records from the close biological relatives of reported missing persons.

Molecular Weight Size Marker (MWSM) - The MWSM, commonly referred to as the "ladder" or "sizing ladder", contains DNA of varying known fragment sizes. It is separated by size along with specimens being subjected to DNA analysis on the same analytical electrophoretic gel. It is used for reference to determine the molecular weights or base pair sizes of the alleles present in specimens.

Molecular weight - Used interchangeably with fragment size or "number of base pairs," as the unit of measure of alleles revealed by RFLP/Southern blot DNA analysis.

NIST - National Institute of Standards and Technology, Gaithersburg, MD 20899

Offender - An individual who has been convicted of a crime defined by statute and whose DNA profile is legally required for inclusion in a DNA identification index.

Offender file - The CODIS computer file (or index) that contains DNA identification records resulting from the DNA profiling of convicted offenders.

Offender sample - A body fluid sample containing DNA, typically a blood sample, that is collected from a convicted offender for the purpose of DNA profiling. These DNA profiles are used to establish an index of DNA identification records that can then be searched for matches against the DNA derived from a crime scene DNA profile.

PCR - An acronym for the Polymerase Chain Reaction. The PCR is an enzymatic process by which a specific region of DNA is replicated during the repetitive cycles (see Cycle).

Perpetrator - The perpetrator is the individual who commits a crime(s). The identity of a perpetrator may or may not be known to the police.

Polymorphism - A variation in the sequence at a given locus where no one allele exists in more than 99 percent of the population

Population file - The CODIS computer file that contains DNA results derived from population samples.

Population sample - A body fluid sample containing DNA, typically a blood sample from an anonymous individual that is subjected to DNA analysis. The results of the DNA analysis are examined along with many other samples for statistical purposes. The statistical analysis then is applied to the interpretation of forensic DNA results. The population samples form the basis of the analyst's opinion as to the significance of a DNA match

Primers - Small oligonucleotides complementary to the 3' ends of the target DNA sequence. A pair of primers specifies the boundaries of the region being amplified during the PCR.

Probe - A single-stranded DNA fragment which is radioactively labeled and used to detect its complementary DNA sequence (the allele) in DNA derived from a specimen. For example, the alleles at the genetic locus D2S44 are detected using the probe YNH24

Quality Assurance - Those planned or systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality

Quality Audit - A systematic and independent examination and evaluation to determine whether quality activities and results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives

Quality Control - The day-to-day operational techniques and the activities used to fulfill requirements of quality

Quality Plan - A document setting out the specific quality practices, resources and activities relevant to a particular product, process, service, contract or project

Reagent blank - This control consists of all reagents used in the test procedure minus any sample. This is used to detect DNA contamination of the analytical reagents and materials

Restriction Enzyme - A bacterial enzyme that recognizes a specific palindromic sequence of nucleotides in double-stranded DNA and cleaves both strands; also called a restriction endonuclease

Restriction Fragment Length Polymorphism (RFLP) - The variation occurring in the length of DNA fragments revealed by digestion with a specific restriction enzyme.

RFLP/Southern blot DNA analysis - The DNA analysis method taught by the FBI Laboratory. It involves the extraction and purification of DNA from a specimen followed by: restriction endonuclease digestion; electrophoretic separation of the digested DNA fragments; immobilization of the separated DNA fragments by Southern blot transfer to a membrane; and detection using single-locus probes, applied to and stripped from the membrane sequentially.

Southern Blot - DNA that has been separated by electrophoresis, transferred from the gel to an immobile support (e.g., nitrocellulose or nylon), and bonded onto the support in single-strand form for hybridization.

Specimen - The body fluid, typically blood or semen, that is the object of DNA analysis for purposes related to forensic identification or statistical population sampling.

SRM - Standard Reference Material is standard reference material available for analytical calibration purposes Specifically SRM 2390 "DNA Profiling Standard" (1992) is DNA reference material for the Human DNA Control K562. It is available from NIST, Attention: Standard Reference Material Program.

Stringency - The conditions of hybridization that increase the specificity of binding between two single-strand portions of nucleic acids, usually the probe and the immobilized fragment Increasing the temperature or decreasing the ionic strength results in increased stringency

Suspect - An individual whose identity is known to the police and who is believed by the police to be the perpetrator of a crime.

Victim - The individual who directly suffers as a result of the commission of a crime For example, a woman who is sexually assaulted is a victim.

STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA

Purpose

The CODIS concept is based on a single central repository of DNA records. These DNA records will be locally generated by subscribing laboratories from around the country. The centralized repository of DNA records will be used to generate investigative leads and to establish statistical estimates of significance of DNA matches in case work. These system-wide standards have been established thereby ensuring that only reliable and compatible DNA profiles are contained in the CODIS files.

Correspondence

Any correspondence regarding STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA should be sent to

Attention: NDIS Custodian
CODIS Program
FBI Laboratory, Rm 3658
Tenth Street, Northwest
Washington, DC 20535

Changes in the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA

From time to time, changes to the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA may be issued. These changes will be promptly instituted in CODIS subscribing laboratories upon notification of the changes. Any laboratory recommending a change to the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA shall contact CODIS Program office in writing. This communication should include the name of a contact person and telephone number, as well as a description of the proposed change and any reasons that would justify the change.

CODIS will accept a DNA profile after it is determined to be compliant with the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA in effect at the time the DNA profile was derived or compliant with the standards that are in place at the time the DNA profile is offered. For example, a "new" molecular weight size marker may be added to the list of acceptable molecular weight size markers. Any DNA profiles offered but previously rejected solely as a result of the use of the previously unrecognized molecular weight size marker will be accepted after the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA are revised to include the "new" molecular weight size marker.

Laboratory Procedures and Practices

All DNA profiles offered to CODIS will be produced in accordance with good laboratory practices. The CODIS subscriber will follow its established and documented quality assurance procedures whenever offering a DNA profile to CODIS. These procedures will include, at a minimum, compliance with the current TWGDAM Document on Quality Assurance.

CODIS Subscriber Obligations

CODIS may, from time to time, send DNA samples to a CODIS subscribing laboratory for DNA profiling analysis. The CODIS subscribing laboratory will analyze the sample(s) according to instructions included with the samples.

Waivers

CODIS will conditionally accept DNA results obtained prior to the effective date of the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA. Waivers will only be granted to certain sections of the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA. These sections are disclosed under "Sections Subject to CODIS RFLP Waivers". Except as otherwise herein noted, no waivers will be granted to DNA records derived after the issuance of STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA including current quality assurance procedures as described by TWGDAM

CODIS will grant a waiver only after the DNA results covered by the application are demonstrated by the laboratory to be reliable and CODIS compatible. The granted waiver will only apply to those DNA records listed in the waiver. The laboratory will retain documents, including notes, raw data, and other appropriate materials that support the waiver application

Application for a Waiver

The format depicted in Figure 1 shall be followed in the application for a waiver of STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA. The application will specify the DNA results that are to be covered by the waiver:

Figure 1 Application for a Waiver of CODIS Standards.

Application for a Waiver

DATE

LABORATORY

ADDRESS

TELEPHONE NUMBER

CONTACT PERSON

REASON FOR WAIVER

DNA RESULTS COVERED BY THE WAIVER

DATE OF FIRST DNA RESULT -

DATE OF LAST DNA RESULT -

CATEGORY OF SPECIMENS (population forensic offender missing person and/or population) -

GENERAL COMMENTS

DATA SUPPORTING WAIVER

Sections Subject to CODIS RFLP Waivers

Applications for waivers to the sections from STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA listed below will be accepted. No other waivers will be granted. Granting of a waiver is at the sole discretion of National CODIS Custodian, and a waiver may be denied for any reason.

Waiver - Laboratory Procedures and Practices

Waivers may be granted for those DNA records that were derived prior to the issuance of, TWGDAM Guidelines on Quality Assurance, as described by TWGDAM, when it is determined that the DNA results covered by the waiver are nonetheless reliable. The laboratory must demonstrate that the qualified DNA records were derived in a manner largely consistent with the Guidelines For Quality Assurance for DNA Analysis", as described by TWGDAM.

The application shall state the specific standards described by TWGDAM that were not followed in deriving the specific DNA profiles covered by the application. Also the dates these analyses were conducted shall be provided. The certification shall be signed and dated (date signed) by a DNA Supervisor, an individual who is administratively responsible for the DNA analysis work of laboratory personnel. Finally, the Laboratory Director shall certify that the laboratory has followed all other standards described by TWGDAM, and that the DNA Supervisor is qualified to make the certifications of compliance.

Waiver - RFLP Protocol.

Waiver to Paragraph 5 under RFLP Protocol:

Data demonstrating that Image Analysis Work Station system other than that developed by the FBI (alternative IAW) produces reliable and CODIS compatible DNA records is required. Also, a test plan and data demonstrating the conversion of the electronic format of the DNA records to a CODIS compatible format are required. The electronic conversion of DNA records to a CODIS data compatible format must be demonstrated to retain the integrity of the DNA record through the conversion process.

The waiver application shall include a detailed description of the alternative IAW software and hardware. The alternative IAW system must feature: capture of a digital image, semi-automatic band placement: geometric correction for electronic migration and electronic capture: and recording of numerical results The application shall specifically state which of these features are supported by the alternative IAW (all are required). The application shall also include a detailed description of all security features of the alternative IAW, including those security features specified by CODIS

The minimum data required to demonstrate compatibility and reliability of the alternative IAW are band size determinations obtained using the FBI developed image analysis work station and the alternative IAW. These comparative determinations shall be performed on the same autoradiogram or set of autoradiograms. Some or all autoradiograms may, at the discretion of CODIS, be furnished by CODIS for comparative sizing. When provided by CODIS, these autoradiograms shall be sized according to instructions provided by CODIS.

When CODIS does not provide autoradiograms, size determinations of at least three different alleles within each of the following size ranges are required:

less than 1500 base pairs (bp)
1501 bp to 2000 bp
2001 bp to 2500 bp
2501 bp to 3500 bp
3501 bp to 4500 bp
4501 bp to 5500 bp
5501 bp to 6500 bp
6501 bp to 7500 bp
7501 bp to 8000 bp
8001 bp to 8500 bp
8501 bp to 9000 bp
9001 bp to 9500 bp
greater than 9500 bp

All alleles exhibited by a DNA sample at a locus used for comparison purposes shall be sized. Also, the autoradiograms from which size determinations were rendered, along with the base pair determinations, shall be submitted with the waiver application. Documents that describe the procedure employed during the evaluation shall be provided. This shall include a clear articulation of which samples on each submitted autoradiogram were sized. These data shall be submitted to CODIS in the format depicted in Figure 2.

Since CODIS will maintain a list of acceptable alternative IAWs, it is recommended that a laboratory wishing to employ an alternative IAW contact CODIS prior to conducting a comparative analysis.

DNA profiles derived using an alternative IAW software/work station will only be accepted by CODIS after the alternative IAW has been demonstrated to meet all CODIS performance standards, including reliability, compatibility, and data integrity.

Image Analysis Software and Data Security. Software and data security are required of an alternative IAW. The level of security must be, at a minimum, equivalent to that offered by the CODIS supported Image Analysis Work Station and data files.

A software security description, a test plan, risk analysis, and the results of the tests performed in accordance with the test plan are required for CODIS evaluation of the alternative IAW. The risk analysis will describe the alternative IAW security features as the features relate to potential compromise of the confidentiality and integrity of the data acquired using and stored in the alternative IAW system.

The security requirements listed herein are intended only as a summary. Other CODIS security requirements may exist. Additional security and CODIS interface requirements for alternative Image Analysis Work Stations will be published separately.

Some of these security measures are:

User Authentication and Access Control - The software must uniquely distinguish each user of the software from every other user. No user will be able to falsely identify him/herself.

Transaction log - The software will record the image analysis work station activities related to imaging and editing/deleting DNA profiles. Some of the required transaction activities are who did what (add/edit/delete) and when.

Backup and Restore Procedures - The alternative IAW software will feature procedures that reduce or eliminate the impact of system hardware failures or malicious user activities.

Partitioning of User Authority - The alternative IAW software will segregate the activities that one user may perform while another user may not (add/edit/view/delete).

Data Base Integrity - Software features that effectively prevent the alteration or deletion of DNA records are required. Thus, for example, a DNA profile can not be changed or deleted in a way that circumvents other alternative IAW software security features.

Unattended Software Protection - The alternative IAW software must ensure that the active software can not be used by a user other than the user logged in the system. Thus, the software, for example, may automatically turn itself off after a period of non-attendance.

Object Re-Use - The alternative IAW software must function in a way that prevents the re-use of data or data elements that have been altered or deleted. Thus when a change or delete is executed, only the change or delete is retained. The unintended restoration of altered data elements shall be precluded. This includes the use of back/restore procedures.

User Security Training - CODIS requires a user security training plan that covers the nature of the security training and how the training will be conducted.

Other - The CODIS security requirements may change from time to time. Upon notification of new or additional security requirements, the alternative IAW software will be promptly modified to encompass the new or additional security requirements.

Duration of the waiver: A waiver granted under this paragraph will remain in effect until CODIS issues superseding security requirements and/or superseding minimum performance standards. Previously granted waivers may be renewed upon approval by CODIS. Approval for a waiver renewal will be granted only after additional information relevant to the superseding requirements are found by CODIS to ensure that the superseding requirements are met by the alternative IAW.

Figure 2. Alternative IAW/CODIS IAW Comparison Work Sheet.

ALTERNATIVE IMAGE ANALYSIS WORK STATION

data demonstrating CODIS compatibility and reliability

LABORATORY: _____ DATE: _____ DETERMINATION: ____

BAND RANGE	BAND# AUTORAD#/ LANE#	ANALYST	CODIS RSLT	ALT. IAW RSLT	% DIFF
<1500 bp					
1501/2000					
2001/2500					
2501/3500					
3501/4500					
4501/5500					
5501/6500					
6501/7500					
7501/8000					
8001/8500					
8501/9000					
9001/9500					
>9500					

Use one form for each set of data determinations

BAND # List the evaluated band first then any other alleles

% DIFF Percent difference calculated as follows

$$\frac{100\ \%\ X\ (\text{CODIS IAW RSLT (result)} - \text{ALTERN IAW RSLT})}{\text{CODIS IAW RSLT}}$$

Waiver - RFLP Human DNA control:

Waiver to Paragraph 1 under Human DNA Control:

All analytical electrophoretic gels exhibiting DNA profiles for use by or inclusion in CODIS will also exhibit a human DNA control. Human DNA controls other than K562 (alternative human DNA control) will only be accepted when sufficient data are presented to determine acceptable values for the alternate human DNA control

The waiver application shall include the initial and final dates on which analyses using the alternative human DNA control were performed and the total number of specimens listed by class (for example, population, convicted offenders, etc.).

CODIS will review the waiver application and either reject or tentatively accept the application. Upon acceptance of a waiver application, CODIS shall specify an experimental design to enable the establishment of tolerance values for the alternative human DNA control. The CODIS laboratory shall conduct the necessary tests and experiments specified by the experimental design and forward all requested data to CODIS. CODIS will then evaluate these data and establish the acceptable tolerances for the alternative human DNA control. The waiver will only apply to analyses conducted prior to 90 days after the effective date of the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA

Waiver - Minimum loci constituting a DNA profile accepted by CODIS.

CODIS will accept any locus listed as "CODIS Accepted Loci" for "population" and "offender" classes of specimens, where results are available for the specified minimum number of loci. Thus CODIS will accept any combination of four loci for the "population" class of specimen and any combination of three loci for the "offender" class of specimen; where these locus combinations are defined from among the "CODIS Accepted Loci" D1S7, D2S44, D4S139, D5S110, D10S28, D14S13, D16S85, D17S26, and D17S79.

The application for a waiver under this section shall include the class of specimens, the dates of analysis, the loci probed and planned for submission to CODIS, and the reason why additional analysis at minimum CODIS loci is not possible.

No waivers to this section will be granted for analysis begun ninety days after the effective date of the STANDARDS FOR CODIS ACCEPTANCE OF DNA DATA

RESTRICTION FRAGMENT LENGTH POLYMORPHISM (RFLP) METHODS

STANDARDS FOR CODIS ACCEPTANCE

Protocol

1 Only DNA analysis protocols that are demonstrated by the laboratory to produce CODIS compatible DNA results will be used in the analysis of samples offered to CODIS. Initially, a protocol will be shown by the laboratory to produce CODIS compatible results by submitting to CODIS DNA results, as part of the normal CODIS quality assurance checks performed automatically, from control samples authorized by CODIS (e.g. K562)

2. The laboratory will demonstrate that it continues to use a protocol that produces CODIS compatible DNA results by its application of controls, like the human DNA control. The control(s) will appear on every RFLP electrophoretic analytical gel that exhibits a DNA profile that will be offered to CODIS. The protocol is an acceptable CODIS protocol as long as the control results are routinely within CODIS tolerances.

3 The restriction enzyme will be HAE III.

4 Only DNA profiles derived by applying DNA probes to loci listed on the "List of CODIS Accepted Loci" will be accepted by CODIS.

5 Derivation of base pair values will be electronically obtained using computer software provided by the Federal Bureau of Investigation.

Changes to the CODIS protocol

1 A laboratory that changes its CODIS protocol will not use the modified protocol in the analysis of specimens that are intended for submission to CODIS until the laboratory demonstrates that the modified protocol produces CODIS compatible results. CODIS compatibility is demonstrated to CODIS by the application of the CODIS human DNA control on analytical electrophoretic gels and obtaining results from these controls that are routinely within CODIS tolerances.

2 The use of a protocol that routinely fails to achieve control results within CODIS established tolerances will be discontinued. No DNA results derived from the use of such a protocol will thereafter be offered to CODIS.

3 At the request of CODIS, a laboratory will demonstrate the reliability and/or CODIS compatibility of its DNA profiles. These requests from CODIS will only arise when CODIS articulates concerns about the reliability or compatibility of the DNA results obtained by the laboratory.

CODIS check samples

CODIS may, from time to time, provide the laboratory with one or more stains for DNA analysis. The analysis of these specimens by the laboratory will augment the routine procedures of CODIS to assure CODIS

subscnbers of the reliability of DNA results maintained by CODIS.

The CODIS subscnber shall promptly conduct DNA analysis of these specimens according to the laboratory's protocol for DNA analysis. The analysis and reporting of results shall be conducted in a manner consistent with instructions included with the samples.

Molecular weight size marker (MWSM):

1. A MWSM from the list of acceptable MWSMs will be run on each gel that exhibits a DNA profile that is offered to or used by CODIS.

2. All specimens and human DNA control(s) on analytical electrophoretic gels will be bracketed by MWSM.

3. MWSMs that bracket specimens, and/or human DNA controls will be of sufficient clarity and intensity within the relevant measurement area of the gel, so that meaningful measurements can be made.

4 No more than five (5) lanes will be contained between any two MWSMs.

5 The MWSM and MWSM lanes will be free of any other samples, standards, markers, or material that would cause the addition, subtraction, or alteration of bands otherwise present in an unadulterated MWSM.

6 The addition of a MWSM ("new MWSM") to the list of acceptable MWSMs will be made by CODIS only after data are presented to CODIS that demonstrate that the "new MWSM" will result in CODIS compatible results and will span the RFLP size range of 600 base pairs (bp) to >10,000 bp.

Human DNA control:

1 The human DNA control K562 (ATCC registered cell line) will be on each analytical electrophoretic gel that exhibits a DNA profile that will be offered to CODIS

2. Any human DNA control measurements outside acceptable values will result in the rejection of all specimens offered from the analytical electrophoretic gel at that locus from CODIS comparisons and from retention for CODIS comparisons. Also, these excluded specimens will not be used by CODIS as population samples

3 Any human DNA controls other than K562 included in a DNA analysis will not be evaluated by CODIS (except as may be described elsewhere in this document). All sized K562 human DNA controls will be evaluated before DNA results from any specimens are accepted by CODIS (for either use or inclusion in CODIS files) These K562 human DNA controls will be within each participating laboratories established tolerances before any DNA profiles from the analytical electrophoretic gel are accepted.

4. The NDIS Custodian will monitor K562 human DNA controls for quality assurance as defined according to the following function[1]

$$\left(\frac{X - X_m}{S_X}\right)^2 - 2R\left(\frac{X - X_m}{S_X}\right)\left(\frac{Y - Y_m}{S_Y}\right) - \left(\frac{Y - Y_m}{S_Y}\right)^2 \qquad K_{(1-\alpha)\,pnl}(1 - R^2)$$

given:

X = *Size value determined for allele 1 by analyst*

X_m = *Expected interlaboratory size values for allele 1*[1]

S_x = *Expected interlaboratory "reproducibility - σ" of allele 1*[2]

Y = *Size value determined for allele 2 by analyst*

Y_m = *Expected interlaboratory size values for allele 2*[2]

S_y = *Expected interlaboratory "reproducibility - σ" of allele 2*[3]

R = *Expected intralaboratory correlation between size value measurements for alleles 1 and 2*[3]

K = *Constant for coverage of 100 (1-α)% of a bivariate normal distribution*[4]

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[1] Certified allele band sizes as stated in the National Institute of Standards and Technology Certificate of Analysis for Standard Reference Material 2390 "DNA Profiling Standard", available from Standard Reference Materials Program, NIST, Gaithersburg, MD 20899 (1992).

[2] Predicted standard deviation for the NIST certified band sizes using equation (7) of J. L. Mudd *et al.* "Interlaboratory Comparison of Autoradiographic DNA Profiling Measurements. Part II. Measurement Uncertainty and Its Propagation". *Analytical Chemistry* (in revision - 1994), assuming 0.3% migration distance measurement uncertainty.

[3] Empirically determined for each locus using data supplied by numerous city, county, state and federal forensic laboratories. Correlations were determined for each laboratory supplying data (between 16 and 20 unique data sets, depending on the locus). The median correlation at each locus was found to be 0.62±0.04.

[4] The limiting critical K for 99% coverage of a bivariate normal distribution = $K_{0.99} = \chi^2(0.01, 2) = 9.21$.

	Parameters from: NIST SRM 2390, ICADPM Part I, Meta-Analysis					
LOCUS	X_m	S_x	Y_m	S_y	R	$K(1-R^2)$
D1S7	4571	37	4231	34	0.62	5.71
D2S44	2907	24	1791	18	0.62	5.71
D4S139	6474	63	3438	27	0.62	5.71
D10S28	1757	17	1182	15	0.62	5.71
D17S79	1982	19	1520	16	0.62	5.71

Monomorphic human DNA controls:

The use of a monomorphic human DNA control is not required by CODIS. However, any CODIS subscriber using a monomorphic probe is required to observe the following:

The monomorphic probe applied to DNA profiles that will be offered to CODIS will not be applied concurrently with a probe to any locus listed on the "List of CODIS Accepted Loci". That is, the application of the monomorphic probe will be sequential with other probes.

Interpretation of DNA profiles:

1. DNA profiles offered to CODIS will be free of artifacts that preclude the interpretation of the DNA profile by a forensic expert.

2. A laboratory offering a DNA profile to CODIS that is derived from a population or convicted offender sample will only offer those alleles that are directly attributed to a human allele and thus always reproducible from fresh blood samples from the individual.

3. A laboratory offering a DNA profile to CODIS that is derived from forensic evidence, will only offer those bands that are directly attributed to human alleles and to the putative perpetrator(s). Alleles derived from forensic profiles that are unambigiously attributed to a victim or individuals other than the perpetrator(s), such as, but not limited to a husband or boyfriend, will not be offered to CODIS.

4 The DNA results from any locus, in which an ambiguity exists in the assignment of one or more alleles to the perpetrator(s), can be offered to CODIS. The mere observation of alleles that may be attributed to

individuals other than the putative perpetrator, does not in itself, preclude offering results to CODIS at the locus.

5. No "correction factors" that alter or adjust the readings derived directly from an Image Analysis Work Station will be applied to the DNA profile offered to CODIS.

CODIS accepted loci:

This list constitutes all loci from which results will be accepted by CODIS. The absence of any particular locus from this list does not suggest the unsuitability of the locus for forensic application. Only radioactively labeled probes will be used to detect alleles at these loci.

The addition of a locus or use of a non-isotopic probe to detect a locus will be accepted by CODIS only after the locus or probe is shown to meet the criteria established by the TWGDAM CODIS Subcommittee.

CODIS Accepted Loci		
D1S7	D2S44	D4S139
D5S110	D10S28	D14S13
D16S85	D18S26	D17S79

Minimum loci constituting a DNA profile accepted by CODIS:

The inclusion of DNA profiles in CODIS derived from population samples, forensic samples, and convicted offender samples requires conclusive fragment size determinations from certain specific loci. In addition, there is a minimum number of loci from which conclusive results are required. DNA profiles which fail to include these loci (number and name), at a minimum, will not be accepted by CODIS.

Minimum Loci Required by CODIS		
Index Category	**Minimum # loci**	**Minimum # loci selected from**
population	4	D1S7, D2S44, D4S139, D5S110*, D10S28
offender	4	D2S44, D4S139, D5S110*, D10S28
forensic	3	CODIS core loci
missing person	TBD	CODIS core loci

* D5S110 will be required after January 1, 1997

Application of probes:

Alleles detected following the hybridization of a membrane must be unambiguously ascribed to a single locus. Therefore, only one locus may be probed during the hybridization of a membrane. The mixing of probes to more than one locus (including CODIS and non-CODIS supported loci) for concurrent application to a single membrane is prohibited.

Accepted molecular weight size marker:

The accepted MWSM are listed below:

Molecular Weight Size Markers Accepted by CODIS
GIBCO BRL, DNA Analysis Marker System
Lifecodes, 23 kb sizing standard
Promega Genetic Analysis Marker Ladder

U.S. Department of Justice
Federal Bureau of Investigation

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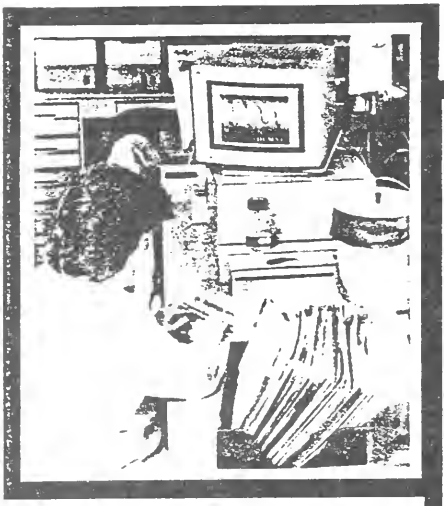

Guidelines for a Quality Assurance Program for DNA Analysis

Instructions for Authors

Manuscripts submitted for publication are accepted on the condition that they have not been or will not be published elsewhere. Manuscripts must be written in clear and concise language. They must be logically organized, progressing from a statement of purpose, through analysis of procedures or evidence, to conclusions and implications. Manuscripts are evaluated according to the following criteria: (a) significance of contribution, (b) technical accuracy, (c) appropriateness for the journal audience, and (d) clarity and effectiveness of presentation.

All manuscripts are subject to peer review by at least two subject-area professionals who remain anonymous. Authors may suggest the names of suitable reviewers.

The editorial staff of the *Crime Laboratory Digest* reserves the right to edit all manuscripts for style, grammar, and punctuation.

Inclusion of a manuscript in the *Crime Laboratory Digest* in no way represents an endorsement or recommendation of any part of that article by the federal government, the Department of Justice, or the Federal Bureau of Investigation. Contributing authors assume total responsibility for the contents and technical accuracy of their submissions.

Submissions may be in the following forms:

Letter to the Editor: A brief communication presenting new technical information, discussing a previously published paper, or requesting information.

Review Article: A basic introduction and overview of new scientific methods and areas of forensic research or interest.

Research Paper or Feature Article: An in-depth discussion of current methods and specific aspects (e.g., advantages and disadvantages) of various procedures and instrumentation.

Technical Article: A step-by-step description of specific analytical procedures, detailing the materials and methods used and evaluating the results.

Technical Note or Case Report: A new application of an existing technique or instructive findings on an unusual case.

Book Review: A summary and analysis of a book or publication of interest to the forensic sciences or related fields.

All submitted manuscripts should be typed double-spaced on 8½ x 11, good quality white paper. The title page should include a concise title, the names and current affiliations of all authors, and the name, complete address, telephone number, and telefax number of the contact author. Manuscripts should be submitted in quadruplicate, one of which must be the original, accompanied by any pertinent tables, graphs, charts, diagrams, figures, or photographs. Upon acceptance for publication, authors are required to submit 3½ or 5¼ disks. The manuscript text and data should be saved on an IBM-compatible computer in WordPerfect 5.0 or 5.1. Authors should keep a copy of the manuscript to prevent loss.

Tables, graphs, charts, diagrams, and figures should be of suitable quality for direct reproduction. They should be on separate sheets of paper and must include appropriate captions or legends. Original photographs should be clear black and white prints on glossy paper.

When reference is made in the text or any related tables, graphs, charts, diagrams, figures, or photographs to a specific product, the name of the product's manufacturer and the city and state of the manufacturer's headquarters must be included.

Referenced citations in the text should be in parentheses and include author names and year of publication (Anderson and Brown 1985). When citing a paper written by three or more authors, write the name of the first author plus *et al.* (Anderson *et al.* 1982; Brown *et al.* 1991). The reference section should be arranged alphabetically by author names and then chronologically. The following are examples of reference styles for the *Crime Laboratory Digest*:

Journal Article:

Davis, H. L. and Jones, B. A. Seasonal variations in plasma hormones. *[illegible]* 88:271-277.

Article or Chapter in a Book or Collective Work:

Monson, K. L. and Budowle, B. A system for semi-automated analysis of DNA autoradiograms. In: *Proceedings of the International Symposium on the Forensic Aspects of DNA Analysis*. U.S. Government Printing Office, Washington, DC, 1989, pp. 127-132.

Book or Entire Volume:

Nolan, F. *The Phonetic Bases of Speaker Recognition*. Cambridge University Press, Cambridge, England, 1983.

Proofs will be telefaxed to authors and should be corrected and returned within 48 hours. Corrections must be limited to typographical errors only.

All manuscripts and other communications relating to the journal should be addressed to:

Editor
Crime Laboratory Digest
FSRTC, FBI Academy
Quantico, VA 22135

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ARTICLES

DEPARTMENTS

SPECIAL FEATURES

Crime Laboratory Digest (ISSN 0743-1872) is a forensic science journal published by the FBI Laboratory Division in cooperat[illegible] [illegible] American Society of Crime Laboratory Directors (ASCLD). It is intended to serve as a means of communication between cr[illegible] [illegible] permitting information of interest and value to be disseminated among crime laboratory scientists.

[illegible] Send address changes to Editor, *Crime Laboratory Digest*, FSR[illegible], FBI Academy, Quantico, VA 22135

Focus on Quality Assurance

Message from the Assistant Director in Charge of the FBI Laboratory

As I settle into my position as head of the FBI Laboratory, I am learning to appreciate the extremely dynamic nature of forensic science. It is very satisfying to work in a profession in which an international community is constantly developing new and improved methods to apply forensic science in support of the criminal justice system. In addition, fundamental forensic practices are evolving to further increase professional integrity. I am referring to quality assurance programs and the countless benefits to be gained by implementing such programs in the forensic sciences.

I am impressed by the growing commitment of laboratory directors and laboratory personnel to comply with quality assurance programs that are emerging throughout laboratories worldwide. The FBI Laboratory is also working diligently to implement a number of organizational policy changes to insure quality in all of our work. Although the FBI Laboratory's commitment to providing superior forensic examination services is renowned, more standardized, formal guidelines for analytical procedures are now being developed to guarantee quality assurance.

In August 1984 I established the Quality Assurance Unit in the Forensic Science Research and Training Center at the FBI Academy in Quantico, Virginia. This move represents a permanent resolve by the FBI Laboratory to provide quality service as we move into the 21st century. The Quality Assurance Unit will help to promote and monitor proper laboratory practices that apply primarily to forensic examination techniques. Through the implementation of a comprehensive quality assurance program, the Quality Assurance Unit will be able to insure that uniform quality assurance guidelines are followed when performing forensic examinations. Through the use of proficiency tests and annual audits, the Quality Assurance Unit will be in a position to monitor overall laboratory activities and recommend procedures that define, standardize, and improve laboratory practices. Through the use of reliable and sound laboratory practices and programs, the FBI Laboratory will be able to meet the challenges of future laboratory accreditations or personnel certifications.

The Quality Assurance Unit will also manage the occupational safety and health program for the FBI Laboratory. Insuring compliance with the Occupational Safety and Health Administration and Environmental Protection Agency standards will be a major responsibility. In addition, protecting

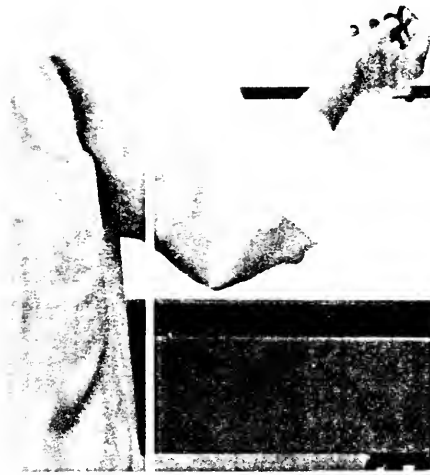
employees from potential hazards while working in the laboratory or at crime scenes will be an integral part of the program. Continued liaison of the Quality Assurance Unit with the FBI Laboratory's Evidence Response Team Unit and Evidence Response Teams in both the Laboratory and in FBI field offices will help provide services which reflect state-of-the-art safety and evidence collection practices. Increased safety training for Evidence Response Teams and other federal, state, and local law enforcement agencies will also be a major focus of the Quality Assurance Unit.

"As the Quality Assurance Unit develops comprehensive quality assurance and safety programs, it will hopefully become a resource for the forensic community for information on laboratory safety and health issues, crime scene safety and health issues, environmental hazards, proficiency testing, and overall management of quality assurance programs."

Once the Quality Assurance Unit was established, the first initiative was to staff the unit as quickly as possible with skilled professionals, and this effort is ongoing. As the Quality Assurance Unit develops comprehensive quality assurance and safety programs, it will hopefully become a resource for the forensic community for information on laboratory safety and health issues, crime scene safety and health issues, environmental hazards, proficiency testing, and overall management of quality assurance programs.

While the successful implementation of quality assurance programs requires significant dedication of human and financial resources as well as administrative support, the benefits are obvious. These benefits are even more apparent when we consider the consequences of not implementing quality assurance programs. In the end, quality assurance simply allows us to have greater confidence in our work and allows us to focus on the exciting aspect of our profession — fact finding through the analysis of forensic evidence.

Milton E. Ahlerich



Guidelines for a Quality Assurance Program for DNA Analysis

Prepared by

Technical Working Group on DNA Analysis Methods

Bruce Budowle, Group Chair
Federal Bureau of Investigation
Quantico, VA

Introduction to 1995 Revised Guidelines

As noted in the introduction to the 1991 edition of the *Guidelines for a Quality Assurance Program for DNA Analysis* published in the April 1991 issue of the *Crime Laboratory Digest* (Vol. 18, No. 2, pp. 44-75), it was recognized that changes in the quality assurance standards for DNA testing would be necessary to accommodate evolving technology and laboratory practices.

Since the publication of the 1991 guidelines, a number of proposed changes to the guidelines have been submitted to the Technical Working Group on DNA Analysis Methods (TWGDAM) Quality Assurance (QA) Subcommittee. As a result of evolving laboratory experience and practices, as well as the advent of mitochondrial DNA analysis technology, it was determined that a review of the current guidelines was necessary.

During the January 1995 meeting of TWGDAM, a number of proposed changes to the guidelines were evaluated by the QA Subcommittee. The proposed changes were submitted in writing and were accompanied by a justification for each change. Based on the evaluation of the proposed changes and the supporting justification, the recommendations of the QA Subcommittee were forwarded to the entire TWGDAM committee for discussion. Following the discussion, each proposed change was voted upon by the TWGDAM members.

A two-thirds majority was required for the adoption of each proposed change. As a result of these votes, revisions to the following sections of the 1991 guidelines were adopted: 4.1.3, 4.1.5.1, 4.4.2.1, 5.3.2, 7.2.2, 7.5.1, 7.5.1.3, 7.5.1.4 (deleted), and 10.1. The 1995 revised edition of the *Guidelines for a Quality Assurance Program for DNA Analysis* follows.

1. Planning and Organization

1.1 Goals - It is the goal of the laboratory's program to:

1.1.1 Provide the users of laboratory services access to DNA typing of selected biological materials associated with official investigations using DNA testing.

1.1.2 Ensure the quality, integrity, and reliability of the DNA typing data and its presentation through the implementation of a detailed quality assurance (QA) program.

1.2 Objectives - It is the objective of the QA program to ensure that:

1.2.1 The analytical testing procedures and reporting of DNA typing are monitored by means of quality control (QC) standards, proficiency tests, and audits on a routine basis.

1.2.2 The entire DNA typing procedure is operating within the established performance criteria and that the quality and validity of the analytical data are maintained.

1.2.3 Problems are noted and corrective action is taken and documented.

1.3 Authority and Accountability

1.3.1 Organization Structure – Defines the relationships within the laboratory between individuals, job responsibilities, and operational units. It defines the relationship of the QA program to DNA analysis and related laboratory operations as well as to the laboratory management.

1.3.2 Functional Responsibilities – The job function and responsibility for each position within the laboratory should be clearly established. It should specify and describe the lines of responsibility for developing, implementing, recording, and updating the QA program.

1.3.3 Levels of Authority – Clear lines of authority and accountability should be established between personnel responsible for the QA program and those assigned to manage and perform the DNA analysis. It should be established as to who may take what action, whether approval is required, and from whom approvals are needed.

2. Personnel

2.1 Job Descriptions

The job descriptions for all DNA personnel should include responsibilities, duties, and skills.

2.2 Qualifications

The education, training, experience, and qualifying criteria of technical personnel within the DNA testing laboratory will be formally established by each laboratory. Supervisors or technical leaders and examiner analysts must demonstrate the ability to critically evaluate and interpret the evidence, results, and data. The minimum requirements for those individuals are specified as follows:

2.2.1 Qualifying Procedure

It is highly desirable that these individuals undergo a formal qualifying procedure which reviews and documents that prerequisite criteria have been satisfied prior to the assumption of duties. These criteria should include:

2.2.1.1 Knowledge of the scientific principles, techniques, and literature of DNA typing as demonstrated by course work and/or written or oral examination.

2.2.1.2 Practical laboratory skills in the performance of DNA analysis as demonstrated by observation and successful analytical results.

2.2.1.3 Competency of individuals engaged in DNA analysis as demonstrated by the successful completion of proficiency testing.

2.2.1.4 Competency of supervisors/technical leaders as demonstrated by the successful completion of proficiency testing — designed to evaluate interpretational skills.

2.2.2 Maintaining Qualification – There must be a procedure for the periodic review of continued education, proficiency testing, and performance of personnel.

2.2.3 Supervisor/Technical Leader

If the supervisor alone does not meet the following criteria, the laboratory must have a technical leader or employ a consultant who satisfies all the criteria or who, in combination with the qualifications of the supervisor, satisfies the criteria. The supervisor/technical leader or other designated qualified individual must regularly review the laboratory work product and must be available for consultation. It is highly desirable that at least one individual possess these qualifications.

2.2.3.1 Education – Must have a minimum of a BA/BS or its equivalent in biology, chemical, or forensic science and have received credit for courses in genetics, biochemistry, and molecular biology (molecular genetics or recombinant DNA technology) or other subjects which provide a basic understanding of the principles of forensic DNA analysis.

2.2.3.2 Training – Must have, at a minimum:

(a) Training in the fundamentals of forensic biology.

(b) Documented training in DNA analysis with individuals experienced in laboratories in a program that includes the methods, procedures, equipment, materials used in forensic DNA analysis and their applications and limitations (ASCLD 1985).

2.2.3.3 Experience – Must have a minimum of 2 years of experience as a forensic serology examiner/analyst and meet all the requirements in Section 2.2.4.3.

2.2.3.4 Continuing Education – Must stay abreast of developments within the field of DNA typing by reading current scientific literature. Attendance at seminars, courses, and professional meetings is highly desirable. Laboratory management must provide the opportunity to comply with these requirements.

2.2.4 Examiner/Analyst

2.2.4.1 Education – Must have a minimum of a BA/BS degree or its equivalent in a biological, chemical, or forensic science and have received credit for courses in genetics, biochemistry, and molecular biology (molecular genetics, recombinant DNA technology) or other subjects which provide a basic understanding of the foundation of forensic DNA analysis

2.2.4.2 Training – Must have, at a minimum

(a) Training in the fundamentals of forensic biology

(b) Training in DNA analysis with individuals, agencies, or other laboratories in a program that includes the methods, procedures, equipment, and materials used in forensic DNA analysis and their applications and limitations (ASCLD 1985)

2.2.4.3 Experience – Must include, at a minimum

(a) One year of forensic biology experience

(b) Prior to independent case work analysis using DNA technology, the examiner analyst must have adequate forensic DNA laboratory experience, including the successful analysis of a range of samples typically encountered in forensic case work. This typically requires 6 months of experience in a DNA laboratory.

2.2.4.4 Continuing Education – Must stay abreast of developments within the field of DNA typing by reading current scientific literature. Attendance at seminars, courses, or professional meetings is highly desirable. Laboratory managers must provide the opportunity to comply with these requirements.

2.2.5 Technicians

2.2.5.1 Technicians involved in performing analytical techniques related to DNA analysis should have a minimum of a BS, BA degree (or equivalent) and receive on-the-job training by a qualified analyst. Technicians will not interpret DNA typing results, prepare final reports, or provide testimony concerning such.

2.2.5.2 Technicians not performing analytical techniques should have the experience and education commensurate with the job description.

3. Documentation

The DNA laboratory must maintain documentation on all significant aspects of the DNA analysis procedure, as well as any related documents or laboratory records that are pertinent to the analysis or interpretation of results, so as to create a traceable audit trail. This documentation will serve as an archive for retrospective scientific inspection, reevaluation of the data, and reconstruction of the DNA procedure. Documentation must exist for the following topic areas.

3.1 Test Methods and Procedures for DNA Typing

This document must describe in detail the protocol currently used for the analytical testing of DNA. This protocol must identify the standards and controls required, the date the procedure was adopted, and the authorization for its use. Revisions must be clearly documented and appropriately authorized.

3.2 Population Data Base – To include number, source, and ethnic and/or racial classification of samples

3.3 Quality Control of Critical Reagents (such as commercial supplies and kits which have expiration dates) – To include lot and batch numbers, manufacturer's specifications, and internal evaluations.

3.4 Case Files/Case Notes – Must provide foundation for results and conclusions contained in formal report

3.5 Data Analysis and Reporting

3.6 Evidence Handling Protocols

3.7 Equipment Calibration and Maintenance Logs

3.8 Proficiency Testing

3.9 Personnel Training and Qualification Records

3.10 Method Validation Records

3.11 Quality Assurance and Audit Records

3.12 Quality Assurance Manual

3.13 Equipment Inventory

3.14 Safety Manuals

3.15 Material Safety Data Sheets

3.16 Historical or Archival Records

3.17 Licenses and Certificates

4. Validation

4.1 General Considerations for Developmental Validation of the DNA Analysis Procedure

4.1.1 Validation is the process used by the scientific community to acquire the necessary information to assess the ability of a procedure to reliably obtain a desired result, determine the conditions under which such results can be obtained, and determine the limitations of the procedure. The validation process identifies the critical aspects of a procedure which must be carefully controlled and monitored.

4.1.2 Validation studies must have been conducted by the DNA laboratory or scientific community prior to the adoption of a procedure by the DNA laboratory.

4.1.3 Once an RFLP procedure has been validated, appropriate studies of limited scope (e.g., population studies, human DNA control value determination) must be available for each new locus used. A similar standard should be maintained when adding new loci to the different PCR based techniques (e.g., addition of short tandem repeat (STR) locus to a validated STR procedure).

4.1.4 The DNA primers, probe(s), or oligonucleotides selected for use in the forensic DNA analysis must be readily available to the scientific community.

4.1.5 The validation process should include the following studies: 1) *Report of a Symposium on the Practice of Forensic Serology* (1987) and 2) Budowle *et al.* (1988).

4.1.5.1 Standard Specimens – The typing procedure should have been evaluated using fresh body tissues and fluids obtained and stored in a controlled manner. DNA isolated from different tissues from the same individual should yield the same type.

4.1.5.2 Consistency – Using specimens obtained from donors of known type, evaluate the reproducibility of the technique both within the laboratory and among different laboratories.

4.1.5.3 Population Studies – Establish population distribution data in different racial and/or ethnic groups.

4.1.5.4 Reproducibility – Prepare dried stains using body fluids from donors of known types and analyze to ensure that the stain specimens exhibit accurate, interpretable, and reproducible DNA types or profiles that match those obtained on liquid specimens.

4.1.5.5 Mixed Specimen Studies – Investigate the ability of the system to detect the components of mixed specimens and define the limitations of the system.

4.1.5.6 Environmental Studies – Evaluate the method using known or previously characterized samples exposed to a variety of environmental conditions. The samples should be selected to represent the types of specimens to be routinely analyzed by the method. They should resemble actual evidence materials as closely as possible so that the effects of factors such as matrix, age, and degradative environment (temperature, humidity, UV) on a sample are considered.

4.1.5.7 Matrix Studies – Examine prepared body fluids mixed with a variety of commonly encountered substances (e.g., dyes, soil) and deposited on commonly encountered substrates (e.g., leather, denim).

4.1.5.8 Nonprobative Evidence – Examine DNA profiles in nonprobative evidentiary stain materials. Compare the DNA profiles obtained for the known liquid blood versus questioned blood deposited on typical crime scene evidence.

4.1.5.9 Nonhuman Studies – Determine if DNA typing methods designed for use with human specimens detect DNA profiles in nonhuman source stains.

4.1.5.10 Minimum Sample – Where appropriate, establish quantity of DNA needed to obtain a reliable typing result.

4.1.5.11 On-Site Evaluation – Set up newly developed typing methods in the case-working laboratory for on-site evaluation of the procedure.

4.1.5.12 It is essential that the results of the developmental validation studies be shared as soon as possible with the scientific community through presentations at scientific/professional meetings. It is imperative that details of these studies be available for peer review through timely publications in scientific journals.

4.2 Characterization of Loci

During the development of a DNA analysis system, basic characteristics of the loci must be determined and documented (Baird 1989; AABB Standards Committee 1990).

4.2.1 Inheritance - DNA loci used in forensic testing shall have been validated by family studies to demonstrate the mode of inheritance. Those DNA loci used in parentage testing should have a low frequency of mutation and/or recombination.

4.2.2 Gene Mapping - The chromosomal location of the polymorphic loci used for forensic testing shall be submitted to or recorded in the Yale Gene Library or the International Human Gene Mapping Workshop.

4.2.3 Detection - The molecular basis for detecting the polymorphic loci shall be documented in the scientific or technical literature.

4.2.3.1 For RFLP, this includes the restriction enzyme and the probes used.

4.2.3.2 For PCR, this includes the primers and probes, if used.

4.2.4 Polymorphism – The type of polymorphism detected shall be known.

4.3 Specific Developmental Validation of RFLP Procedures

4.3.1 Restriction – The conditions and control(s) needed to ensure complete and specific restriction must be demonstrated.

4.3.2 Separation – Parameters for the reproducible separation of DNA fragments must be established.

4.3.3 Transfer – Parameters for the reproducible transfer of DNA fragments must be established.

4.3.4 Detection – The hybridization and stringency wash conditions necessary to provide the desired degree of specificity must be determined.

4.3.5 Sizing – The precision of the sizing procedure must be established.

4.4 Specific Developmental Validation of PCR-Based DNA Procedures

4.4.1 Amplification

4.4.1.1 The PCR primers must be of known sequence.

4.4.1.2 Conditions and measures necessary to protect preamplification samples from contamination by post-PCR materials should be determined (See Section 7.5).

4.4.1.3 The reaction conditions such as thermocycling parameters and critical reagent concentrations (primers, polymerase, and salts) needed to provide the required degree of specificity must be determined.

4.4.1.4 The number(s) of cycles necessary to produce reliable results must be determined.

4.4.1.5 Potential for differential amplification must be assessed and addressed.

4.4.1.6 Where more than one locus is amplified in one sample mixture, the effects of such amplification on each system (alleles) must be addressed and documented.

4.4.2 Detection of PCR Product

The validation process will identify the panel of positive and negative controls needed for each assay described as follows:

4.4.2.1 Characterization without Hybridization

(a) When a PCR product is characterized directly, appropriate standards for assessing the alleles shall be established.

(b) When a PCR product is characterized by direct sequencing, appropriate standards for assessing the sequence shall be established.

4.4.2.2 Characterization with Hybridization

(a) Hybridization and stringency wash conditions necessary to provide the desired degree of specificity must be determined.

(b) For assays in which the amplified target DNA is to be bound directly to a membrane, some mechanism should be employed to ensure that the DNA has been applied to the membrane.

(c) For assays in which the probe is bound to the membrane, some mechanism should be employed to show that adequate amplified DNA is present in the sample (e.g., a probe which reacts with any amplified allele or a product yield gel).

4.5 Internal Validation of Established Procedures (ASCLD 1986)

Prior to implementing a new DNA analysis procedure or an existing DNA procedure developed by another laboratory that meets the developmental criteria described under Section 4.1, the forensic laboratory must first demonstrate the reliability of the procedure in-house. This internal validation must include the following:

4.5.1 The method must be tested using known samples.

4.5.2 If a modification which materially effects the results of an analysis has been made to an analytical procedure, the modified procedure must be compared to the original using identical samples.

4.5.3 Precision (e.g., measurement of fragment lengths) must be determined by repetitive analyses to establish criteria for matching.

4.5.4 The laboratory must demonstrate that its procedures do not introduce contamination which would lead to errors in typing.

4.5.5 The method must be tested using proficiency test samples. The proficiency test may be administered internally, externally, or collaboratively.

5. Equipment, Materials, and Facilities

5.1 Equipment

Only suitable and properly operating equipment should be employed. Where critical parameters of equipment operation are identified in the validation procedure, monitoring of those parameters should be conducted and documented in the manner necessary to maintain successful operation of the typing technique.

5.1.1 Inventory – A list of equipment requiring calibration and monitoring for DNA analysis, which includes the manufacturer, model, serial number, agency inventory number, and acquisition dates, should be maintained.

5.1.2 Operation Manual – The manufacturer's operation manual should be readily available.

5.1.3 Calibration, Maintenance Procedures, and Logs – There should be written calibration and maintenance procedures and schedules. There should be a permanent log of calibration and maintenance of equipment essential for DNA typing (*e.g.*, thermal cyclers and water baths).

5.1.4 Dedicated Equipment – Dedicated equipment should be readily identifiable as such.

5.2 Materials and Reagents

Chemicals and reagents should be of suitable quality, correctly prepared, and demonstrated to be compatible with the methods employed.

5.2.1 Logs must be maintained of commercial supplies and kits which have expiration dates (*e.g.*, amplification kits, probes, or enzymes), as indicated in Section 3.3.

5.2.2 Formulation - There must be a written procedure for the formulation of reagents, standards, and controls.

5.2.3 Labeling Requirements - Labels should include identity, concentration, date of preparation, identity of individual preparing reagents, special storage requirements, and expiration date, where appropriate.

5.2.4 A current inventory of supplies and materials should be maintained to include information on supplier, catalog number, lot number, date received, and storage location.

5.2.5 Dedicated Materials and Reagents - Dedicated materials and reagents should be readily identifiable as such.

5.2.6 Glassware and Plastic Supplies Preparation – There should be specific procedures for cleaning preparation, and sterilization.

5.3 Laboratory Facilities for PCR Analysis

A PCR laboratory will require special laboratory configuration and sample handling (*AmpliType User Guide* 1990).

5.3.1 Examination Work Area – Area(s) for examination, photography, and microscopy must be separated in time or space from the extraction and amplification setup areas.

5.3.2 Extraction Work Area(s) – This area is for sample extraction, concentration, and digestion. It must be physically separate from the amplified DNA work area and be separated in time or space from the PCR setup area. An extraction area for samples containing low DNA levels (*e.g.* telogen hairs, old bone) should be separated in time or space from other DNA extraction areas.

5.3.3 PCR Setup Work Area - This area is isolated from the extraction area by time or in space to ensure that the reaction mix cocktails are prepared in a clean environment. This area must be physically separated from the amplified DNA work area.

5.3.4 Amplified DNA Work Area - This area is separated physically in the laboratory for containment of amplified DNA product. This area includes the amplification area with the thermal cycler and space for all procedures utilizing the product for typing (*e.g.*, gel electrophoresis, hybridization, and washing). Amplified DNA should be stored and disposed of in this area. All equipment and reagents used in this area should be dedicated and should not be used in either the extraction or PCR setup areas.

5.3.5 Decontamination – There must be written procedures for the cleaning and decontamination of facilities and equipment from DNA and PCR product DNA.

6. Evidence Handling Procedures

Evidence and samples from evidence must be collected, received, handled, sampled and stored so as to preserve the identity, integrity, condition, and security of the item.

6.1 Sample Labeling – Each sample must be labeled with a unique identifier in accordance with agency policy.

6.2 Chain of Custody – A clear, well-documented chain of custody must be maintained from the time the evidence is first received until it is released from the laboratory (ASCLD 1986).

6.3 Sample Handling and Storage – Each agency will prepare a written policy to ensure that evidence samples (including isolated DNA and membranes) will be handled, processed, and preserved so as to protect against loss, contamination, and deleterious change. Disposition of evidence should be in accordance with law and agency regulations. Refer to Section 5.3 for PCR sample handling considerations.

7. Analytical Procedures

7.1 Sample Evaluation and Preparation

7.1.1 General characterization of the biological material should be performed prior to DNA analysis. Evidence samples submitted should be evaluated to determine the appropriateness for DNA analysis.

7.1.2 When semen is identified, a method of differential extraction should be employed, and, where appropriate, each of the DNA fractions typed (see Section 4.1.5.10).

7.1.3 Testing of evidence and evidence samples should be conducted to provide the maximum information with the least consumption of the sample. Whenever possible, a portion of the original sample should be retained or returned to the submitting agency, as established by laboratory policy.

7.2 DNA Isolation

7.2.1 The DNA isolation procedure should protect against sample contamination.

7.2.2 The effectiveness of the DNA isolation procedure should be evaluated by periodic use of an appropriate source of human DNA.

7.3 Procedures for Estimating DNA Recovery:

Where appropriate, a procedure should be used for estimating the quality (extent of DNA degradation) and quantity of DNA recovered from the specimens. One or more of the following procedures may be employed to evaluate the effectiveness of the DNA recovery.

7.3.1 Yield Gel – Yield gels must include a set of high molecular weight DNA calibration standards for quantitative estimate of yield.

7.3.2 UV Absorbance – Absorbance and wavelength standards or a high molecular weight DNA calibration standard may be used.

7.3.3 Fluorescence – Approximate quantification of extracted DNA can be accomplished by comparison with known concentrations of high molecular weight DNA.

7.3.4 Hybridization – Quantitation with human/primate specific probes requires an appropriate set of human DNA standards.

7.4 Analytical Procedures for RFLP Analysis

7.4.1 Restriction Enzymes

7.4.1.1 Prior to its initial use, each lot of restriction enzyme should be tested against an appropriate viral, human, or other DNA standard which produces an expected DNA fragment pattern under standard digestion conditions. The restriction enzyme should also be tested under conditions that will reveal contaminating nuclease activity.

7.4.1.2 Demonstration of Restriction Enzyme Digestion – Digestion of extracted DNA by the restriction enzyme should be demonstrated using a test gel which includes:

(a) Size Marker – Determines approximate size range of digested DNA

(b) Human DNA Control – Measures the effectiveness of restriction enzyme digestion of genomic human DNA

7.4.2 Analytical Gel – The analytical gel used to separate restriction fragments must include the following.

7.4.2.1 Visual Marker – Visual or fluorescent markers which are used to determine the end point of electrophoresis

7.4.2.2 Molecular Weight Size Markers – Markers which span the RFLP size range and are used to determine the size of unknown restriction fragments. Case samples must be bracketed by molecular weight size marker lanes.

7.4.2.3 Human DNA Control – A documented positive human DNA control of known type which produces a known fragment pattern with each probe and serves as a systems check for the following functions:

(a) Electrophoresis quality and resolution
(b) Sizing process
(c) Probe identity
(d) Hybridization efficiency
(e) Stripping efficiency

7.4.2.4 A procedure should be available to interpret altered migration of DNA fragments

7.4.3 Southern Blots Hybridization – The efficiency of blotting, hybridizations, and stringency washes are monitored by the human DNA control and size markers

7.4.4 Autoradiography – The exposure intensity is monitored by the use of multiple X-ray films or by successive exposures in order to obtain films of the proper intensity for image analysis.

7.4.5 Image and Data Processing – The functioning of image and data processing is monitored by the human DNA control allelic values

7.5 Analytical Procedures for PCR-Based Techniques

7.5.1 Internal Controls and Standards

The laboratory's QC guidelines should contain specific protocols to assess critical parameters in normal operations which include the following:

7.5.1.1 Negative controls to be included with each sample set are:

(a) A reagent blank
(b) An amplification blank

7.5.1.2 A human DNA known type must be introduced at the amplification step as a positive control and carried through the remainder of the typing.

7.5.1.3 Where appropriate, controls should be collected from the evidence and should be processed in the same manner as evidence samples.

7.5.1.4 To characterize amplified fragment length polymorphisms, markers which span the allele size range must be used. Case samples must be bracketed by marker lanes.

8. Case Work Documentation, Interpretation, Report Writing, and Review

Laboratories should have policies, checks, and balances in place which ensure the reliability and completeness of the documentation, data analysis, reports, and review process.

8.1 Case Work Documentation

Documentation must be in a form such that a competent analyst or supervisor/technical leader, in the absence of the primary analyst, would be able to evaluate what was done and to interpret the data.

Documentation must include, but is not limited to, data obtained through the analytical process. It should also include information regarding the packaging of the evidence upon receipt and the condition of the evidence itself, paying particular attention to those factors which are relevant to the preservation of the biological material. All documentation of procedures, standards, and controls used, observations made, results of the tests performed, charts, graphs, photographs, autoradiographs, communications, etc., which are used to support the analyst's conclusions must be preserved as a record according to written laboratory policy. Results should be preserved by photography, autoradiography, or other suitable means.

8.2 Interpretation of Data

Laboratories should have general guidelines for interpretation of data for each method of DNA analysis.

8.2.1 Evaluation of Controls

8.2.1.1 Guidelines for interpreting and acting upon positive and/or negative control results.

8.2.1.2 Guidelines for statistical monitoring of the human DNA control if appropriate to the procedure (ANSI/ASQC A1-1987; ANSI/ASQC Z1.1-1985; ANSI/ASQC Z1.2-1985; ANSI/ASQC Z1.3-1985; AT&T Technologies 1985; Westgard *et al.* 1981; Gryna 1979; Bicking and Gryna 1979; National Bureau of Standards 1966).

8.2.2 Evaluation of Samples

8.2.2.1 The basis for concluding when samples are or are not the same type or when the results of the analysis are inconclusive or uninterpretable should be established.

8.2.2.2 For RFLP analysis, confirmation of visual matches of the restriction fragment bands must be made by quantitative analysis based on tolerance limits.

8.2.2.3 Statistical Evaluation – The frequency of occurrence for the DNA profile should be calculated using a scientifically valid method from an established population data base.

8.3 Report Writing

Contents – It is highly desirable that reports contain the following:

8.3.1 Case Identifier

8.3.2 Identity of Examiner/Analyst

8.3.3 Date of Report

8.3.4 The DNA Locus (defined by the Nomenclature Committee of the International Gene Workshop) as identified by particular probe(s) or sequence(s)

8.3.5 Restriction Enzyme, Primer Pair, or Other Descriptor of the Methodology

8.3.6 Results

8.3.7 Conclusions

8.3.8 Statistical Evaluation

8.3.9 Signature of the Reporting Analyst

8.4 Review

Data documentation, and reports must be reviewed independently by a second qualified individual. Prior to issuing a report, both individuals must agree on the interpretation of the data and the conclusions derived from that data.

9. Proficiency Testing

Proficiency testing is used periodically to demonstrate the quality performance of the DNA laboratory and serves as a mechanism for critical self-evaluation. This will be accomplished by the analysis and reporting of results from appropriate biological specimens, submitted to the laboratory as open and/or blind case evidence.

All specimens submitted as part of an open or blind proficiency test must be analyzed and interpreted according to the DNA analysis protocol approved by the laboratory for use at the time of the proficiency test.

Participation in a proficiency testing program is a critical element of a successful QA program and is an essential requirement for any laboratory performing forensic DNA analysis. A forensic laboratory involved in DNA analysis may establish its own proficiency testing program or establish a program in cooperation with another forensic laboratory.

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The DNA laboratory should participate in proficiency testing programs, conducted by outside institutions or provided by other reputable sources, which are appropriately designed for forensic DNA analysis.

9.1 Open Proficiency Testing

Open proficiency test specimens are presented to the laboratory and its staff as proficiency specimens and are used to demonstrate the reliability of the laboratory's analytical methods as well as the interpretive capability of the examiner/analyst. Participation in an open proficiency test program is the primary means by which the quality performance of the DNA laboratory is judged and is an essential requirement if a DNA laboratory is to perform case work.

9.1.1 Personnel

Open proficiency testing pertains to those laboratory examiners, analysts and technicians actively engaged in DNA testing.

9.1.2 Frequency

Open proficiency tests must be submitted to the DNA testing laboratory such that each examiner, analyst, as well as those technicians involved in performing analytical techniques related to DNA analysis, are tested at least twice a year.

9.1.3 Specimens

Each open proficiency test may consist of dried specimens of blood and/or other physiological fluids, either singly or as a mixture. Each sample to be tested should contain an amount sufficient so that a conclusion can be drawn from the results of the analysis.

For those DNA procedures which use electrophoretic analysis for identification of the DNA polymorphisms, the number of specimens included in the proficiency test should be such that all may be accommodated on a single analytical gel.

For those DNA analysis procedures which use PCR for DNA amplification, coupled with a nonelectrophoretic method for the identification of the DNA polymorphism, an equivalent number of samples should be tested.

Those samples which comprise proficiency tests intended for PCR-based techniques must include the appropriate negative controls as specified in Section 7.5.1.3.

9.1.4 Sample Preparation, Storage, and Distribution

(a) All specimens and proficiency tests should be uniformly prepared using materials and methods that ensure their integrity and identity.

(b) All open proficiency test specimens will be prepared on washed cotton cloth, cotton swabs or other suitable material.

(c) Each specimen and set must be labeled with a unique identifier that should be independently verified by at least one other person to ensure proper assignment of the identifier.

(d) A portion of each specimen used to prepare the open proficiency test should be retained by the preparing laboratory for possible referee analysis and comparison if circumstances dictate.

(e) A person in the DNA laboratory, as designated by laboratory manager, should acknowledge the receipt of each proficiency test and assign it to the DNA laboratory staff.

9.2 Blind Proficiency Testing

Ideally, blind proficiency test specimens should be presented to the testing laboratory through a second agency. These samples should appear to the examiner/analyst as routine evidence. The blind proficiency test serves to evaluate all aspects of the laboratory examination procedure, including evidence handling, examination/testing, and reporting. It is highly desirable that the DNA laboratory participate in a blind proficiency test program, and every effort should be made to implement such a program.

9.2.1 Personnel

Blind proficiency testing pertains only to personnel previously qualified by their laboratory to conduct DNA testing.

9.2.2 Frequency

Those laboratories which have implemented a blind testing program and are engaged in the analysis and interpretation of DNA profiles should be tested by a blind proficiency test at least once a year.

9.2.3 Specimens

Each blind proficiency test will consist of liquid or dried specimens of blood and/or other physiological fluids, either singly or as a mixture. Each sample to be tested should contain an amount sufficient so that a conclusion can be drawn from the results of the analysis.

For those DNA procedures which use electrophoretic analysis for identification of the DNA polymorphisms, the number of specimens included in the proficiency test should be such that all may be accommodated on a single analytical gel.

For those DNA analysis procedures which use PCR for DNA amplification, coupled with a nonelectrophoretic method for the identification of the DNA polymorphism, an equivalent number of samples should be tested.

Those samples which comprise proficiency tests intended for PCR-based techniques must include the appropriate negative controls as specified in Section 7.5.1.3.

2.4 Sample Preparation, Storage, and Distribution

(a) All specimens and proficiency tests should be uniformly prepared using materials and methods that ensure their integrity and identity.

(b) All blind proficiency tests should be prepared so as to realistically simulate the characteristics of actual case work.

(c) The identity of each specimen and set must be independently verified by at least one other person to ensure proper assignment of the identifier.

(d) A portion of each specimen used to prepare the blind proficiency test should be retained by the preparing laboratory for possible referee analysis and comparison if circumstances dictate.

(e) Once prepared, all samples must be packaged separately, and sets must be stored until submission to the testing agency so as to maintain their integrity and condition.

(f) The QA coordinator, or other individual designated by the laboratory, will make all necessary arrangements for the covert submission of the blind proficiency test, including supporting documentation and agency contact

(g) Unless specifically authorized by the laboratory director or QA coordinator, prior to the analysis and reporting of the blind proficiency results, no person in the laboratory undergoing blind proficiency testing should be aware of the ongoing blind proficiency test or the personnel involved

9.3 Documentation of Proficiency Test Results

9.3.1 Open Proficiency Tests

At a minimum, the following proficiency test data and information should be collected and submitted to the QA coordinator or other designated individual for evaluation

(a) Open proficiency test set identifier
(b) Identity of examiner/analyst
(c) Dates of analysis and completion
(d) Copies of all data sheets and notes
(e) Photographs of yield, post-restriction (digestion) test, and analytical gels and/or dot blots as appropriate
(f) Lot numbers of primers or probes and the sequence of use
(g) Lot numbers of commercially prepared supplies or kits
(h) Original or duplicate autorads, where appropriate
(i) Computer imaging sizing data, where appropriate
(j) Likelihood estimates for samples
(k) Results/conclusions

9.3.2 Blind Proficiency Tests

The report of the DNA laboratory will be sent to the submitting agency in the normal course of laboratory operations, and prior arrangements should be made for its immediate forwarding to the QA coordinator or other designated individual

Upon receipt of the forwarded DNA report, the QA coordinator or other designated individual will require that the DNA laboratory provide the data and documentation specified in Section 9.3.1. In addition, documentation on the receipt, storage, handling, and chain of custody may also be requested for review. The blind proficiency test evidence may also be recovered from the testing or submitting agency and examined for proper documentation and handling. If the testing laboratory retains portions of the tested materials or products of its analysis, these should be examined for proper documentation and storage

9.4 Review and Reporting of Proficiency Test Results

The QA coordinator or other designated individual will review all test materials and compare results to the information from the manufacturer of the test. The QA coordinator will provide a written summary report for each proficiency test to the examining examiner/analyst and other appropriate individuals as established by the laboratory policy. This review should be conducted in a timely manner. All original notes, records, and other data pertaining to the open proficiency test results should be retained according to laboratory policy

9.5 Corrective Action

The specific policies, procedures, and criteria for any corrective action taken as a result of a discrepancy in a proficiency test should be clearly defined and approved by the appropriate individuals in accordance with established laboratory policies.

9.5.1 Authority and Accountability

It is the responsibility of the QA coordinator or designated individual to assure that discrepancies are acknowledged and that any corrective action is documented.

In the event of an unresolved disagreement between the designated QA individual and DNA laboratory, the matter should be referred to the laboratory director.

9.5.2 Administrative Error

Any significant discrepancy in a proficiency test determined to be the result of administrative error (e.g., clerical error, sample confusion, improper storage, inaccurate documentation, etc.) will be corrected according to established laboratory policy.

9.5.3 Systematic Error

Any significant discrepancy in a proficiency test determined to be the result of a systematic error (e.g., equipment, materials, environment) may require a review of all relevant case work since the DNA unit's or laboratory's last successfully completed proficiency test. Once the cause of the discrepancy has been identified and corrective action has been taken, all examiners/analysts should be made aware of the appropriate corrective action in order to minimize the recurrence of the discrepancy.

9.5.4 Analytical/Interpretative Error

(a) Any significant discrepancy in a blind or open proficiency test result determined to be the consequence of an analytical/interpretative discrepancy should prohibit the individual(s) involved in producing the discrepant result from further examination of case evidence until the cause of the problem is identified and corrected. The QA coordinator or designated individual will determine the need to audit prior cases, according to established laboratory policy.

(b) Before resuming analysis or interpretation of case work, an additional set of open proficiency samples must be successfully completed by the individual responsible for the discrepancy.

9.6 Documentation

The results of all proficiency tests will be maintained by the DNA laboratory according to established laboratory policy.

10. Audits

Audits are an important aspect of the QA program. They are an independent review conducted to compare the various aspects of the DNA laboratory's performance with a standard for that performance (Mills 1989; Saxle 1988). The audits are not punitive in nature but are intended to provide management with an evaluation of the laboratory's performance in meeting its quality policies and objectives.

10.1 Audits or inspections should be conducted at least once every 2 years by individuals separate from and independent of the DNA testing laboratory. It is highly desirable that at least one auditor be from an outside agency.

10.2 Records of each inspection should be maintained and should include the date of the inspection, the area inspected, the name of the person conducting the inspection, findings and problems, remedial actions taken to resolve existing problems, and the schedule of next inspection.

11. Safety

11.1 Policy – The DNA testing laboratory shall operate in strict accordance with the regulations of the pertinent federal, state, and local health and safety authorities.

11.2 Written Manuals – Written general laboratory safety and radiation safety manuals shall be prepared by the laboratory and be made available to each member of the DNA analysis laboratory and/or other persons affected (*Code of Federal Regulations* 1988a, 1988b; Bond 1987; Gibbs and Kasprisin 1987; Sax and Lewis 1987; National Fire Protection Association 1986; National Research Council 1981; Wang *et al.* 1975; Steere 1971).

11.3 Material Safety Data Sheets (MSDS) – There should be a file of MSDS received from the manufacturer for all chemicals used in the laboratory. These data sheets should be readily available to all laboratory personnel.

11.4 Storage and Disposal – All chemicals, supplies, and radioactive materials must be stored, used, and disposed of under conditions recommended by the manufacturer and in a manner conforming to established safety requirements.

Glossary

Allele: In classical genetics, one of the alternate forms of the gene at a particular locus. In DNA analysis, the term "alleles" is commonly extended to include DNA fragments of variable length and/or sequence which may have no known transcriptional product but are detected in a polymorphic system.

Amplification: Increasing the number of copies of a desired DNA sequence.

Amplification Blank: A control that consists of only amplification reagents without the addition of sample DNA. This control is used to detect DNA contamination of the amplification reagents and materials.

Anneal: The formation of double strands from two complementary single strands of DNA and/or RNA. In the second step of each PCR cycle, primers bind or anneal to the 3' ends of the target sequence.

Autoradiograph: An image produced on a piece of film by radioactive or chemiluminescent material.

Cycle: The PCR cycle consists of three steps: 1) denaturation of the template, 2) annealing of primers to complementary sequences at an empirically determined temperature, and 3) extension of the bound primers by a DNA polymerase.

Denaturation: The conversion of helical, double strands of DNA to single strands by heat or chemical reagents. Denaturation by heat is the first step of each PCR cycle.

Differential Extraction: A step-wise extraction procedure designed to separate intact sperm heads from lysed sperm and other cell types. The separation generally results in an enrichment of sperm DNA in one cell fraction relative to the other cell fraction. The separate fractions can be analyzed individually.

DNA Contamination: The unintentional introduction of exogenous DNA into a DNA sample or PCR reaction prior to amplification.

Extension: The covalent linkage of deoxyribonucleoside triphosphates in a template-directed manner by DNA polymerase. Linkage is in a 5' to 3' direction starting from the 3' end of bound primers. PCR primers are extended one nucleotide at a time by a DNA polymerase during each PCR cycle.

Genome: The genetic constituent of an organism; contained in the chromosome.

Hybridization: The process of complementary base pairing between two single strands of DNA and/or RNA.

Kilobase (kb): Unit of 1000 base pairs of DNA or 1000 bases of RNA.

Locus: The site on a chromosome where a gene or a defined sequence is located.

Polymerase Chain Reaction (PCR): An enzymatic process by which a specific region of DNA is replicated during repetitive cycles (see cycle).

Polymorphism: A variation in the sequence at a given locus where no one allele exists in more than 99 percent of the population.

Primers: Small oligonucleotides complementary to the 3' ends of the target sequence. A pair of primers specifies the boundaries of the region being amplified during the PCR.

Probe: A fragment or sequence of DNA that hybridizes to a complementary sequence of nucleotides in another single-strand nucleic acid (target).

Quality Assurance: Those planned or systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality.

Quality Audit: A systematic and independent examination and evaluation to determine whether quality activities and results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.

Quality Control: The day-to-day operational techniques and the activities used to fulfill requirements of quality.

Quality Plan: A document setting out the specific quality practices, resources, and activities relevant to a particular product, process, service, contract, or project.

Reagent Blank Control: This control consists of all reagents used in the test process minus any sample. This is used to detect DNA contamination of the analytical reagents and materials.

Restriction Enzyme: A bacterial enzyme that recognizes a specific palindromic sequence of nucleotides in double-stranded DNA and cleaves both strands; also called a restriction endonuclease.

Restriction Fragment Length Polymorphism (RFLP): The variation occurring in the length of DNA fragments generated by a specific restriction enzyme.

Southern Blot: DNA that has been separated by electrophoresis, transferred from the gel to an immobile support (e.g., nitrocellulose or nylon), and bonded onto the support in single-strand form for hybridization.

Sterile Technique: In the context of PCR work, it does not include flaming of bottles and pipets. Gloves, sterile supplies, and clean work areas are required in addition to the use of separate pipet tips for each reagent addition to each reaction tube. Additional explanation of the sterile technique for PCR work can be found in the *AmpliType® User Guide* (1990), Section 2 – Laboratory Setup.

Stringency: The conditions of hybridization that increase the specificity of binding between two single-strand portions of nucleic acids, usually the probe and the immobilized fragment. Increasing the temperature or decreasing the ionic strength results in increased stringency.

Substrate Control: Unstained material adjacent to, or representative of, the area upon which the biological material is deposited.

Variable Number of Tandem Repeats (VNTR): Copies of a DNA sequence arranged in succession in a chromosome.

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Notes from the Technical Working Group on DNA Analysis Methods

The Technical Working Group on DNA Analysis Methods (TWGDAM) was formed to address the development and implementation of forensic DNA analysis methods in public crime laboratories throughout North America. This group has met with considerable success in the coordination, conduct, and reporting of experimental studies supporting restriction fragment length polymorphism (RFLP) analysis. In addition, TWGDAM members have published guidelines for conducting the RFLP and polymerase chain reaction (PCR)-based tests for use by the crime laboratory community.

As new methods and techniques arise from the fields of molecular biology and population genetics, it has been considered a responsibility of TWGDAM to examine these advances for their potential to enhance existing procedures or open new routes to the genetic typing of biological evidence. During the February 1993 meeting of TWGDAM, representatives of participating laboratories were organized into several working groups. Each working group was tasked with examining emerging issues and developments pertinent to a specific area of DNA typing. Groups were designated to study the following areas: (1) additional guidelines for quality assurance (QA) and quality control (QC) of DNA analyses, (2) enhancements to RFLP analysis, (3) new approaches to using PCR, and (4) methods for the typing of mitochondrial DNA (mtDNA).

The following is a summary of the activities of the various TWGDAM working groups which resulted from the July 1994 meeting.

QA/QC WORKING GROUP

The QA/QC Working Group did not meet.

RFLP WORKING GROUP

I. Members in Attendance and Laboratory Affiliations

Harold Deadman – FBI Laboratory (Group Chair)
Eric Buel – Vermont Department of Public Safety
Joseph Caruso – Indianapolis-Marion County Forensic Services Agency
Thomas Grant – Missouri State Highway Patrol
Kenneth Konzak – California Department of Justice
Donald MacLaren – Washington State Patrol
David McClure – South Carolina Law Enforcement Division
James Pollock – Florida Department of Law Enforcement
Renee Romero – Washoe County Sheriff's Office
Clement Smetana – US Army Criminal Identification Laboratory
Christine Tomsey – Pennsylvania State Police
Gary Verret – Royal Canadian Mounted Police
Linda Watson – Maryland State Police

II Summary of Meeting

A Evaluation of a Temperature Stable *Hae III* Restriction Enzyme furnished by Cellmark Diagnostics, Inc. (update) – James Pollock

1 The South Carolina Law Enforcement Division observed a retardation of bands with the temperature stable *Hae III* compared with normal banding patterns with regular *Hae III*. This retardation appeared to be dependent upon the use of ethidium bromide (EtBr). If EtBr was used, no difference was observed in banding patterns with the two *Hae III* enzymes. Band retardation was observed only when EtBr was not used. A possible explanation is that some type of protein-DNA complex, which would have less mobility, is being maintained in the absence of EtBr. If EtBr was intercalated into the DNA, it might prevent the protein-DNA binding. No other work was reported on this issue.

B Population Studies of New Probes – Thomas Grant

1 Population data on D5S110 were distributed to FWGDAM members. Five thousand individuals were probed. The data have yet to be analyzed.
2 Additional probes being considered for evaluation are D7S467 and D17S26. D7S467 is fairly sensitive, but it is not as polymorphic as most probes presently used.

C Probe Usage Survey

1 A survey was conducted to determine the number of probes used routinely in forensic laboratories. The results are as follows:

7 probes	South Carolina Law Enforcement Division
6 probes	Federal Bureau of Investigation
	Florida Department of Law Enforcement
	Pennsylvania State Police
	Washoe County Sheriff's Office
5 probes	California Department of Justice
	Indianapolis-Marion County Forensic Services Agency
	Maryland State Police
	Missouri State Highway Patrol
	Vermont Department of Public Safety
4 probes	Royal Canadian Mounted Police

The probes used by the laboratories surveyed were D1S7, D2S44, D4S139, D5S110, D7S467, D10S28, and D17S79.

D Reporting of Coincidental Match Probabilities

1 A survey was conducted to determine if a minimum probability was used in reporting results of a DNA comparison. While most laboratories used a minimum probability, it varied among the different laboratories and ranged from 1 in 100 million to 1 in 10 billion. A few laboratories reported the calculated probability while one laboratory reported the largest probability in the databases used by that laboratory.
2 A survey was conducted to determine the statistical approach used by different laboratories when a three-band profile is involved in a match. Most laboratories would report the match but would not attempt to incorporate the results into the final multilocus probability.

F. Measurement Error Study (update) – Eric Buel

1. Dried bloodstains were prepared and distributed to 10 to 12 laboratories. These stains are from individuals who have large fragments (greater than 10,000 base pairs) present in some of their profiles. Only four laboratories have returned sizing data at this time. Results from all of the laboratories are needed so that appropriate statistical analyses of the data can be conducted.

F. Chemiluminescent Detection (update) – Clement Smetana

1. The US Army Criminal Identification Laboratory is attempting to develop an overnight incubation procedure that is less time-consuming. It is presently using Gibco BRL's ACES 2.0 and Lumiphos-Plus for detection. The question of when a laboratory should switch to chemiluminescence was discussed. Most laboratories agreed that the time to switch is when all probes presently used are accessible in the chemiluminescence format and when it had been demonstrated that the probes have adequate sensitivity.

G. Statistical Approaches for Criminal Paternity – Gary Verret

1. A suggested statistical approach for use in criminal paternity cases was developed by George Carmody from Carlton University. This approach is currently used by the Royal Canadian Mounted Police.

H. Discussion of Problems/Solutions Associated with RFLP Analysis

1. It was reported that precut K562 from Promega was producing extra bands. Laboratories having this problem began purchasing uncut K562 and cutting it in the laboratory.
2. Many laboratories have successfully extracted DNA from samples without using dithiothreitol (DTT). Extraction buffer without DTT seems to provide better recovery, especially with degraded samples.
3. Synthetic oligo probes (*i.e.*, D2S44 and D17S79 from Lifecodes) are generally more sensitive than purified insert counterparts. An exception has been noted with probe D2S44 and a very small allele. The synthetic oligo probe produced a one-band profile, whereas a purified insert D2S44 probe produced a two-band profile. The missing band was small (approximately 770 base pairs). For very small fragments, the flanking DNA that is present in the purified insert probe but absent in the synthetic oligo probe may be necessary to generate sufficient binding for detection. It was mentioned that Lifecodes currently cannot sell D2S44.
4. A paper recently published in *Nucleic Acids Research* claims that a single-strand cutting enzyme is involved in apoptosis (programmed cell death). Degraded DNA could contain many single-strand nicks which could affect their flexibility and perhaps their mobility. This could be why degraded DNA has slightly greater mobility than higher quality DNA.
5. Several laboratories reported DNA bands detected by ladder probes but not human probes.
6. Extra bands (usually weak) have been observed by a number of laboratories with probes D2S44 and D1S80. These bands are observed in known blood samples and seem to follow the primary bands around. They have been called "buddy" or "bloody" bands because their positions seem to be affected by the positions of the primary bands. These extra bands may result from nuclease activity clipping off a small portion of each allele while the DNA is organized in the nucleosomes in liquid blood. If this were happening, the flanking DNA that surrounds the variable number of tandem repeats (VNTR) could be responsible for organizing the DNA around the nucleosome so that hypersensitive sites open to nuclease cutting would be in the same or similar positions for each chromosome.
7. Some smearing of the size marker ladders was observed when Gibco BRL agarose was used. Other lots of the same type of agarose were fine.

PCR WORKING GROUP

I. Members in Attendance and Laboratory Affiliations

Bruce Budowle – FBI Laboratory (Group Chair)
F. Samuel Baechtel – FBI Laboratory
Jeffrey Ban – Virginia Division of Forensic Sciences
Charles Barna – Michigan State Police
Elizabeth Benzinger – Illinois State Police
David Bing – CBR Laboratories, Inc.
Catherine Comey – FBI Laboratory
George Duncan – Broward County Sheriff's Department
Marcia Eisenberg – Roche Biomedical Laboratories
Pamela Fish – Chicago Police Department
George Herrin – Georgia Bureau of Investigation
Roger Kahn – Metro-Dade Police Department
Robert Keister – Orange County Sheriff's-Coroner Department
Terry Laber – Minnesota Bureau of Criminal Apprehension
Jenifer Lindsey – FBI Laboratory
Susan Narveson – Arizona Department of Public Safety
Mark Nelson – North Carolina Bureau of Investigation
Pamela Newall – Centre of Forensic Sciences
Lawrence Presley – FBI Laboratory
Dennis Reeder – National Institute of Standards and Technology
Rebecca Reynolds – Roche Molecular Systems
Georgia Sue Rogers – Alabama Department of Forensic Sciences
Cecilia von Beroldingen – Oregon State Police
Stacy Warnecke – Kentucky State Police

II. Summary of Meeting

A. Substrate Controls – Jenifer Lindsey

1. In a validation study for envelopes, the FBI Laboratory detected faint typing dots in controls (sterile swabs) for both DQα and Polymarker systems using an organic extraction method. It did not have any problem when the controls were extracted using Chelex 100. This phenomena could cause problems in interpretation. It was suggested that a threshold study be conducted to determine the amount of DNA that needs to be present to prevent the amplification of the contaminant encountered on the control swabs.
   a. Threshold Study
      1) Cut clean swabs in half.
      2) Extract one-half of swab using an organic extraction method. Capture the DNA using a Centricon 100 concentrator. Q.S. the sample to 200 µl.
      3) Slot blot 20 µl of the sample (1/10 of total).
      4) Amplify and type the sample.
      5) If any swabs show typing results, add DNA to the other half of those swabs (10 ng, 5 ng, 1.25 ng, 0.625 ng, 0.300 ng).
      6) Report results to Bruce Budowle within 3 months.

B. Population Estimates/PCR-Based Systems – Ceiling

1. David Bing reported a case in which the court requested that he select the most frequent frequencies from databases for his calculations.
2. It was suggested that local population studies be conducted and that the population data be collected.

C. D1S80

1. High bands, 41+ should be binned
2. p- should be used for homozygotes

D. Product Royalties and Patents

1. The issue of royalties and patents and how they will affect the cost of products remains unresolved. It is hoped that negotiations with the Human Identification Trade Association and individual companies will solve the problem. FWGDAM hopes to negotiate a solution to this problem.

E. Polymarker – Rebecca Reynolds

1. Roche Molecular Systems has updated its Polymarker population data.
2. Polymarker validation studies indicate that coamplification does not compromise results at each locus. The study compared results generated by amplifying at a single locus to those obtained from the Polymarker multiplex.
3. Polymarker loci are organized according to size. As the sample degrades, the intensities from locus to locus will show differences. However, the overall balance of the dots generally will remain constant. If hybridization temperatures are too high, one may observe intensity differences at the GC and LDLR loci. At these loci, as the temperature increases, the intensity will decrease, thus creating an imbalance.

F. Polymarker Validation/FBI – Bruce Budowle

1. The FBI validation of the Polymarker system included the following parameters:
   a. Cross-reaction with other species
   b. Stability, time/sunlight
   c. Substrates
   d. Chemical contamination
   e. Mixtures
   f. Sensitivity
   g. Tissues
   h. Hybridization temperature
   i. Population studies

2. The cross-reaction study showed hybridization with:
   a. Higher primates
   b. Low-level hybridization with goat at high DNA input levels (20 to 30 ng)

3. The tissue study indicated no problems.
4. The hybridization study demonstrated a more efficient binding at 54 C. However, at 55 C (manufacturer's recommendation), there is less cross reactivity. The FBI Laboratory will continue to use 55 C.
5. Population studies demonstrate that there are more differences between major groups than within major groups.

G. New Product Development/Roche Molecular Systems – Rebecca Reynolds

1. The next generation of strips may be a bar code format. This will allow for more loci and/or systems to be put on a strip.
2. Strips are being developed for mtDNA typing based on Mark Stoneking's sequences.
3. Strips are now available for sex markers. These markers will be incorporated into other strips in the future.

MITOCHONDRIAL DNA WORKING GROUP

I. Members in Attendance and Laboratory Affiliations

Joseph DiZinno – FBI Laboratory (Group Chair)
Charles Ganther – University of California at Berkeley
Mitchell Holland – Armed Forces Institute of Pathology
Terry Melton – Pennsylvania State University (nonmember)
Mark Stoneking – Pennsylvania State University
Mark Wilson – FBI Laboratory

II. Summary of Meeting

A. The group discussed various issues regarding the development of mtDNA technology for forensic casework.

B. Charles Ganther is now working in George Sensabaugh's laboratory at the University of California at Berkeley, and he recently sequenced DNA from 94 individuals from Sierra Leone. He is in the process of comparing the pattern types and distributions of these sequences with a database of African American samples from New York, NY. So far, he is observing similar mtDNA sequence pattern types and distributions in both populations.

C. Mitchell Holland is completing a mutation rate study of 100 to 150 mother–child comparisons. No data from this study were presented at the meeting. He also is optimizing primer pairs for mtDNA amplification and modifying the Armed Forces Institute of Pathology's bone extraction protocol.

D. Terry Melton presented mtDNA data utilizing a sequence specific oligonucleotide hybridization technique to study subpopulation heterozygosity and its effect on determining the probabilities of random matches in forensic applications. Mark Stoneking also is beginning a mtDNA study of approximately seven generations in a closed population from Tristdan da Cunha, an isolated island in the mid-Atlantic Ocean.

E. Mark Wilson discussed the progress of the FBI Laboratory's mtDNA research effort. The FBI Laboratory is researching multiplexing of HV1 and HV2 amplification and the use of restriction endonucleases to minimize contamination. The FBI Laboratory has established preliminary protocols for hairs, bones, and teeth and has created population databases consisting of 50 African Americans, 50 Caucasians, and approximately 30 Orientals.

F. The group considered establishing QA/QC guidelines for laboratories using mtDNA in forensic casework. The group wants to establish these guidelines, but it was decided that more information is needed before guidelines can be established. The group will reconsider establishing QA/QC guidelines at the next TWGDAM meeting.

G. Mitchell Holland distributed copies of the proposed U.S. Department of Defense quality assurance program for mtDNA identification of ancient remains. He agreed to distribute the QA/QC guidelines recommended by the College of American Pathologists and the American Society of Crime Laboratory Directors to all TWGDAM mtDNA members prior to the next TWGDAM meeting. The FBI Laboratory will collect and distribute other PCR QA/QC guidelines to all mtDNA members.

H. The group provided some basic QA/QC guidelines that might be considered for the application of mtDNA typing to forensic casework. These guidelines are as follows:

1. Physically separate extraction space should be available for anticipated low-level DNA extraction procedures.
2. Use of a laminar flow hood for extraction and amplification setup.
3. Use of dedicated reagent/supplies for low-level DNA extraction and amplification.
4. Any validated typing or sequencing methodology is acceptable (automated or manual sequencing, reverse dot blot, PCR oligonucleotide ligase assay, etc).
5. Extraction and amplification blanks should be run with all PCR amplifications in casework.
6. Extraction and amplification of questioned samples should be performed before extraction and amplification of known samples, if performed in the same area. Questioned samples also should be sequenced before known samples.
7. Strive for typing of HV1 and HV2 with a minimum number of ambiguities.
8. Reference samples should be typed for all laboratory personnel involved in the process.

I. The group briefly discussed the possibility of developing a regional laboratory structure for the forensic application of mtDNA technology. This will be discussed further at the next TWGDAM meeting.

The following 19 pages are a reprint of the Executive Summary of a report by the Counterdrug Technology Assessment Center of the Office of National Drug Control Policy. The report provides the results of the technical evaluation of the BULLETPROOF™ and DRUGFIRE™ ballistic imaging systems.

Please note that the original page numbers of this report have been maintained. Although the report begins on page 51 of the *Crime Laboratory Digest*, it then follows the page sequence of the original report's Executive Summary (pages i through xviii). The main text of the report and the appendices are not included in this reprint.

Normal pagination sequence for the *Crime Laboratory Digest* resumes on page 70.

Copies of the complete report are available from the Office of National Drug Control Policy, Counterdrug Technology Assessment Center, Executive Office of the President, Washington, DC 20500.

BENCHMARK EVALUATION STUDIES of the BULLETPROOF and DRUGFIRE BALLISTIC IMAGING SYSTEMS

A Technical Evaluation with Recommendations for Action

Executive Office of the President
Office of National Drug Control Policy
Counterdrug Technology Assessment Center

November 1994

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF NATIONAL DRUG CONTROL POLICY
Washington, D.C. 20500

Recently, the Office of Management and Budget requested that my office conduct a technical performance assessment of two ballistic imaging systems, BULLETPROOF AND DRUGFIRE. The report provides the results of the assessment of the technical performance of the two ballistic imaging and examination systems and recommendations on ways to integrate the systems into a single quite versatile system. The Counterdrug Technology Assessment Center (CTAC) within my office organized and carried out the study.

For the past seventy years, forensic experts have used the comparison microscope to examine the ballistics of weapons used in violent crimes. One by one, a Firearms Examiner would compare recovered specimens against a test specimen fired from a suspect weapon. We now have an opportunity to introduce advanced imaging system technology to assist the firearms examiner. The new approach, called ballistic imaging, provides an examiner with state-of-the-art data acquisition, image matching, image manipulation, and networked communications capabilities. With a ballistic imaging system, the examiner uses data searching and image correlation algorithms to interpret the class and individual characteristics of the ammunition under examination.

Based on my thirty years experience in police work, I am firmly convinced that the deployment of regional networks of mutually compatible ballistic imaging systems would result in a dramatic increase in linking and solving more criminal cases. The recommendations from the report should be considered as Federal guidelines for the introduction of ballistic imaging technology. To ensure compatibility with the regional networks serving their area in the future, I would encourage the directors of the more than 160 laboratories around the country to consider the recommendations contained within the report.

Lee P. Brown
Director

BENCHMARK EVALUATION STUDIES of the BULLETPROOF® and DRUGFIRE™ BALLISTIC IMAGING SYSTEMS

Executive Summary

At the request of the Office of Management and Budget (OMB), the Office of National Drug Control Policy - Counterdrug Technology Assessment Center (ONDCP/CTAC) organized an independent evaluation of two computer based ballistic imaging systems named **BULLETPROOF®** (BP) and **DRUGFIRE™** (DF). These ballistic imaging systems use the powerful searching capabilities of the computer to match the images of recovered crime scene evidence against digitized images stored in a computer database.

The BP system, used to analyze bullets, has been sponsored, in part, by the Bureau of Alcohol, Tobacco, and Firearms (BATF) of the United States Treasury Department. The DF system, used to analyze cartridge cases, has been sponsored by the Federal Bureau of Investigation (FBI) of the United States Department of Justice.

The three objectives of this independent evaluation project were to 1) perform an independent evaluation of the BP and DF systems consisting of system performance and life cycle cost analyses, 2) perform a "redundancy analysis", and 3) perform an "integration analysis". To conduct this evaluation project, CTAC assembled an independent team of experts consisting of a project leader from the Houston Advanced Research Center (HARC), a systems engineer and cost analyst, a computer and image analyst, an optics engineer, and two Firearms Examiners. The names, affiliations, and concise resumes of the experts on the Independent Evaluation Team are listed in Appendix A.

The performance of the sophisticated image acquisition, correlation algorithms, network communications, and design of the BP and DF systems was evaluated using a standard series of computer image analysis and system evaluation criteria commonly referred to as measures of effectiveness (MOEs). These system performance MOEs included: overall system accuracy, overall processing capability, system processing speed, complexity, computer requirements, database size restrictions, interface compatibility, network compatibility, human factors, reliability, environmental limitations, facilities requirements, and expandability. These MOEs are standard performance measures that would be used to evaluate any computer based image matching system. Additionally, a Life Cycle Cost analysis was performed on each system based on a *national scale systems deployment plan* over a five year time frame. The entire set of MOEs were agreed to and approved by BATF, FBI, and OMB. Because the functionality of the two ballistic imaging systems continues to evolve, their performance measured by the MOEs should be considered as indications of the current performance a Firearms Examiner could expect from the BP and DF systems.

Firearms Examiners have traditionally classified and identified ballistic evidence on bullets and cartridge cases from *class* and *individual* characteristics. *Class* characteristics identify a family of firearms and, in some cases, distinguish different manufacturers. The bullet *class*

characteristics include the number of land and groove impressions, direction of twist, and the land impression width Cartridge case *class* characteristics include the location of the extractor and ejector marks, the shape of the firing pin and the firing pin drag Thus, *class* characteristics by themselves are useful in that they can reduce a large database to a more manageable level With a computer based ballistic imaging system, the Firearms Examiner now uses sophisticated data searching and image correlation algorithms to interpret the class and individual characteristics of the ammunition under examination.

The traditional method of ballistic evidence examination as performed by a Firearms Examiner manually compares, one by one, the recovered specimens against a test specimen fired from a suspect weapon This current procedure for determining if a recovered firearm was used to fire one of the cartridge cases or bullets in the *open case files* is extremely time consuming The procedure requires the examiner to physically remove the evidence from a vault, mount the test evidence specimens on a microscope, and perform an optical comparison This comparison can be as short as thirty (30) minutes or as long as twenty (20) hours (or more) depending on the difficulty of the marks and degree of documentation required. At first glance, this does not seem significant However, after considering the number of open case files and their broad geographical distribution, it is evident that there are considerable problems with the current examination methods The chain of custody requirements often make it impractical to routinely analyze such evidence Currently, unsolved open case files are only consulted when the Firearms Examiner has definitive information from the investigator that two or more cases may have involved a common firearm. Obviously, this is an infrequent occurrence By using a ballistic imaging system, the computer retains the *images* of the evidence and can transmit that *image* to other computer systems These computer based ballistic imaging systems allow the Firearms Examiner to quickly review and possibly link large amounts of evidence to a crime while minimizing the evidence chain of custody requirements

For each of the ballistic imaging systems, the Independent Evaluation Team spent approximately one week (five working days) on-site These on-site evaluations consisted of demonstrations, real-time *stress tests*, hands-on operational experience, and question and answer sessions The system stress tests were utilized by the Independent Evaluation Team to gain a better understanding of how each system worked and to determine possible operator bias in data input and sample matching

The full-up BP system was evaluated at the BATF Forensic Science Laboratory in Rockville, Maryland The full-up DF system was evaluated at the FBI Laboratory in Washington, DC During each week of on-site evaluations, the Independent Evaluation Team was accompanied by forensic experts and contractor support from the *outside agency* The accompanying team helped bring important information to the attention of the Independent Evaluation Team During each week of systems evaluation, closed door sessions were held to discuss proprietary information. The *outside agencies and contractors* were excluded during these proprietary meetings.

A *controlled baseline database* was developed consisting of five calibers of weapons 25 Auto, 380 Auto, 9 mm, 38 Special/357 Magnum, and 45 Auto Each caliber of weapon consisted of thirty (30) distinct guns; two fired bullets and two fired cartridge cases were supplied from each gun The *baseline database* consisted of a total of one hundred fifty pairs of specimens (5

calibers X 30 guns X 2 specimens each = 300 specimens or 150 pairs). All of these database specimens (including the double blind test specimens, discussed below) were judged by the Firearms Examiners on the Independent Evaluation Team as *minimally damaged or pristine*. The bullets were forwarded directly to BATF and the cartridge cases directly to FBI. This entire set of specimens, including the test specimens, are referred to as the *ONDCP database* throughout this report. A self correlation and a double blind test was conducted on both systems. These tests, based on five calibers of handguns, were designed and overseen by the two Firearms Examiners on the Independent Evaluation Team. For these tests, the databases were delineated by caliber only. Furthermore, the five separate caliber databases were artificially enlarged by adding previously existing images representing individual weapons. That is, the *ONDCP database of bullets* was enlarged by adding images already on file at BATF. Similarly, the *ONDCP database of cartridge cases* was enlarged by adding images already on file at FBI. These additional bullet and cartridge case images were selected at random by BATF and FBI, respectively. These enlarged databases were created to better simulate real-world field operations. Specifically, the following table summarizes the test series database sizes used in these tests. Also note that BATF had a large image database of 38 Special/357 Magnum weapons, therefore, an additional test database was constructed *only* for BP by adding 350 images representing 38 Special/357 Magnum handguns (denoted by an asterisk in the table). BATF, FBI, and OMB agreed to the design of the individual databases.

Database Sizes for BP and DF Test Series

Caliber	Series Designation	ONDCP Supplied Weapons	FBI/BATF Add-on Weapons	Total Weapons in Database
25 Auto	A	30	100	130
380 Auto	B	30	250	280
9 mm Luger	C	30	500	530
38 Sp /357 Mag	D	30	30 (350*)	60 (380*)
45 Auto	E	30	100	130

The *self correlation test* was performed only on the 9 mm Luger samples (series C, 530 samples total). This test simply asked the ballistic imaging systems to find the respective mate to each of the thirty (30) pairs of ONDCP samples in the expanded 9 mm caliber database. The second test was a *double blind* test series for each of the five calibers. This double blind test series requested the BP and DF systems to determine new matches in the ONDCP database for an additional set of controlled test samples. Specifically, an additional ten (10) test samples per caliber (*i.e.*, 50 bullets and 50 cartridge cases, some of which were control samples) were supplied to BATF and FBI. The BP and DF personnel were asked to conduct their standard computer correlation, selection, video image comparison, and identification process. The result of each of the fifty (50) blind tests was a final list of high confidence candidates, if any. Under normal circumstances, the Firearms Examiner would requisition these high confidence candidates for physical examination under comparison microscope to make a conclusive identification. The results of the double blind tests were based on this list of high confidence candidates. The double blind test results were examined using three (3) statistical techniques to establish the validity of the results. In all three statistical analyses, the test results were found to be significant at the 95% confidence level.

To perform the Life Cycle Cost analysis, the *national scale systems deployment* model was as follows: beginning in FY95, four (4) operational clusters are deployed annually for a total of twenty active clusters by the end of FY99. All clusters are deployed as five site networked systems (for a total of 100 individual computer systems by the end of FY99). Each cluster of five networked systems would consist of one central imaging and analysis station (*i.e.*, the server) and four regional imaging and analysis stations. The central imaging and analysis station acts as the cluster control unit and master database hub, it would also pass data among all units in the cluster. *State and Local Work-Years are not included in this Life Cycle Cost model for either the BP or DF system.*

The findings from this evaluation study show a number of interesting and candid results. The most notable of these results are:

1. Both ballistic imaging systems are extremely useful to the Firearms Examiner in their current configuration.

2. There are approximately 160 Federal, State, and Local Forensic Laboratories in the United States that could benefit from the deployment of one or both of these ballistic imaging systems. The deployment of the BP and DF systems should result in an increase in linking and solving more criminal cases.

3. The deployment of the BP and DF ballistic imaging systems will not reduce manpower requirements.

4. The BP and DF systems are not redundant. However, they perform similar functions on different types of ballistic evidence.

5. The procedure of matching bullets is inherently more complex compared to matching cartridge cases. This result is simply due to the *nature of the evidence* and the amount of data that must be analyzed to perform the image matching task by the computer algorithms. The BP system is addressing the more difficult problem of matching bullets. The DF system is addressing the problem of matching cartridge cases. The Independent Evaluation Team does not know of any other ballistic imaging systems capable of performing these tasks. Also, there is a lack of historical information for computer based ballistic image correlation tests to judge the respective performances of these systems.

6. BP and DF represent major improvements in ballistic identification technologies. To realize the full potential of the systems would require continued engineering development. Both systems have enormous potential to become an extremely effective tool to the Firearms Examiner.

7 A Firearms Examiner requires state-of-the-art data acquisition, image matching, image manipulation, and networked communications capabilities available in modern computer based technologies. Clearly, a Firearms Examiner (or other end user) would be much more efficient and knowledgeable on a single, versatile, state-of-the-art ballistics imaging system.

8 From a systems engineering point of view, the Firearms Examiners' ballistic imaging system requirements can be met by available technology Based on the current technological status of the BP and DF systems (the only two ballistic imaging systems on the market today), the Firearms Examiners' ballistic imaging system requirements would be met by integrating BP and DF into one common versatile platform. Also quite interesting is that, generally, weak points in one system are strong points in the other Specifically, the *front end* (microscope, lighting system, and data acquisition system) of the BP system should be combined with the *back end* (computer system and networking capability) of the DF system. Both the BP and DF systems have proprietary operational computer image correlation algorithms which should be used in the common platform

9 The results of the auto correlation tests showed that BP ranked the test match in the *first place position* 25.6% of the time; DF ranked the test match in the *first place position* 13.3% of the time. For rankings in *positions one (1) through ten (10)*, BP found the test match 42.6% of the time compared to 56.6% for DF.

10. In the double blind tests, BP operators identified 20 of 30 possible correct matches (*i.e., hits*), DF operators identified 28 of 30 possible correct matches Also, from the 20 control samples (*i.e.*, test specimens without mates in the database), BP had four (4) false positives, DF had three (3) false positives.

11. The results of the double blind tests indicate BP would have difficulty identifying smaller caliber bullets.

12. The results of the double blind tests allowed a comparison of the image matching comparison speed From scanning the test specimen into the database to generation of the final high confidence candidate match list, the DF system established a match at least three (3) times faster than the BP system If specimen images are already present in the database, the DF system establishes a match least seven (7) times faster than the BP system This noticeable difference in times to establish a match can be explained by two main considerations. First, BP requires the recording and analysis of megabytes of bullet image data while DF requires only kilobytes of cartridge case image data Second, a Firearms Examiner simply requires more time to conduct a visual examination on a pair of bullets compared to a pair of cartridge cases

13 Using the *five year national scale systems deployment* model, the BP system would be approximately three (3) times more expensive than DF to deploy on a national scale, with current pricing under Federal contracts, including volume discounts. Specifically, the results from the model indicate that the BP deployment would require approximately $41,221,000 and 82 BATF Work-Years; the DF deployment would require approximately $13,568,000 and 33.5 FBI Work-Years. *State and Local Work-Years are not included in this Life Cycle Cost model for either system.*

14 For single system purchases, the price differential BP and DF expands to range from approximately 6:1 to 10:1, depending on system configurations. Specifically, the current single unit purchase price for a stand-alone SAS/DAS BP system is approximately $540,000. The single unit purchase price for a baseline stand-alone DF system ranges from approximately $51,000 (client and server operations on one SPARCstation™) to $95,000 (client and server operations on two separate SPARCstation™s). These figures, based on current contracts and pricing, include hardware and software procurement, installation, checkout, and initial training. BP systems are offered at discount pricing for quantity purchases.

15. The United States Government should consider performing a *Should Cost Analysis* of an integrated system with the capabilities of both the BP and DF systems before acquiring any ballistic imaging system(s). Through a first order approximation, the Independent Evaluation Team estimates the *Should Cost* of such an integrated system to be in the range of $150,000 to $250,000.

16 The United States Government should consider performing a *Cost Benefit Analysis* on such an integrated ballistic imaging system before acquiring any ballistic imaging system(s).

17 Several specific recommendations have been conveyed to the developers of the BP and DF ballistic imaging systems. These recommendations are listed on pages 37 and 38 of this report.

The following pages describe the performance of the BP and DF systems based on the MOEs. These results, and others, are documented and discussed in detail throughout the remainder of this report.

This report represents the opinions of the *entire* Independent Evaluation Team; no Independent Evaluation Team Member offered any dissenting opinion. Both BATF and FBI have supplied addendums to this report which are contained in Appendices F and G, respectively.

BULLETPROOF® and DRUGFIRE™
Performance Chart

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Type of Evidence Analyzed	Bullets	Cartridge Cases
Overall System Accuracy was measured solely on the self correlation and double blind tests		
a Self Correlation Results:		
First Place Position	25.9%	13.3%
Positions 1 to 10	42.6%	56.6%
b Double Blind Test Results		
True Negatives	16 of 20	17 of 20
False Positives	4 of 20	3 of 20
Hits	20 of 30	28 of 30
Misses	10 of 30	2 of 30
System Processing Speed was measured by the time required for data acquisition and the time for automated search and correlation.		
a Data acquisition		
1 Time to calibrate the system for scanning an initial test sample	No Procedures	No Procedures
2 Time to set up a sample for scanning.	Approx. 2 minutes	Approx. 1 minute
3 Time required to acquire the test sample data, display the data, and verify the data's completeness and accuracy.	Approximately 14 minutes	Approximately 11 minutes
4 Data transfer time	Approx. 1 minute for 1 bullet image from DAS to SAS on the LAN	Automatic
b Search and Correlation.		
1 Time required to search the database to obtain primary candidate matches	Approximately 2 to 7 seconds/image	Approximately 7 to 10 images/second
2 Time required for the Firearms Examiner to view the primary candidate(s) and the reference specimen on the high resolution computer monitor.	Approximately 5 minutes per bullet	Approximately 6 minutes per cartridge case

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Overall Processing Capability was based on the time required to correlate 1000 unknown specimens against an established database consisting of 1000 images. In this hypothetical measure, the 1000 unknown samples are *not* added to the database. For both BP and DF, these times scale linearly with database size and number of correlation search requests.		
	20.8 days	1.25 days
Complexity was a qualitative measure to gauge system operational qualities such as calibration, sample preparation, data acquisition, display, processing, data storage, image correlation, and image standards and quality assurance techniques.		
a. Ease of system calibration:	No calibration	No calibration
b. Ease of sample preparation:	Easy, C clamp jig, mounting stub	Easy, Sticky wax, needs mechanical jig
c. Ease of data acquisition, display, processing, and storage	Operator sets video image boundaries, focus, illumination level; user must view 2 video screens; users can input detailed case file information; users must initiate transfer from DAS and receive on SAS for data storage; system is easy to learn and use.	Operator must adjust specimen centering, focus, illumination, and orientation (rotation), users can input detailed case file information, image storage is automatic and transparent to the user; system is easy to learn and use
d. Ease of test sample image correlation to the database	User can select multiple filters based on GRCs and other characteristics for an *individual* correlation, selection is menu driven and easy to use; *batch* runs only incorporate system default GRC filter settings.	User can select multiple filters based on GRC filters. Selection is menu driven and easy to use
e. Image standards requirements - quality assurance techniques:	Performed by user; highly user subjective.	Performed by user, highly user subjective

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Computer Requirements were measured by a description of system computer(s) capabilities (operating speed, RAM, *etc.*), demographic data used in the image search and correlation process, the ease of modification and editing of the main database file, and supporting peripheral equipment.		
a. System computer(s) capabilities	DAS consists of a 486DX2, 66MHz, EISA Bus, 20 MB of RAM, 170 MB hard drive, and 1.2 GB erasable optical disk. SAS is the same, but has an additional 1 GB hard drive and 525 MB cartridge tape	Client system consists of a Sun SPARCstation 10 with 32 MB of RAM, 1 GB hard drive, and 19" high resolution monitor Server system is same, with 4 GB hard drive, 250 MB cartridge tape drive
b. Demographic data used and their effect in the image search and correlation process	Standard GRC filters and other user specified characteristics to effectively narrow the search space, additional built-in filter based on LEA widths to quickly accept or reject candidate images for correlation.	Standard GRC filters and other user specified characteristics to effectively narrow the search space
c. Ease of modification and editing of the main database file	User can only perform modifications from the DAS; modifications require an additional transfer session to effect changes in the database	Individual case mods can be made from any client, only the database administrator can delete files from the database
d. Supporting peripheral equipment	Video and image printer strongly suggested	Video and image printer strongly suggested

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Database Size/Restrictions was measured by storage requirements, total number of data sets that can be held in the system data storage component, level of detail captured in the original imaging process and data compression capability and its affect on image resolution and quality		
a. Storage required for each sample data set.	Approximately 350 kB per LEA (i.e., 2.1 MB for a 6 LEA bullet), uncompressed images are stored on the DAS optical drive, a 2.1 MB original image is re-sampled and compressed to approximately 200 kB, text and signature data are approximately 20 kB per bullet, compressed image data are stored on the SAS optical drive, text, and signature data are stored on the SAS hard drive	Each standard image size is approximately 30 kB; the user has option of storing multiple standard images and other auxiliary images; single cartridge case data file with 2 standard images and 3 additional images auxiliary images are approximately 150 kB on the server.
b. Total number of data sets that can be held in the system data storage component(s)	600 uncompressed images on the DAS optical disk drive Approximately 3,000 compressed images on the SAS optical disk drive, approximately 50,000 text and signature data files on the SAS hard drive	Approximately 27,000 cartridge cases on the server
c. Data compression capability and its affect on image resolution and quality	Data compression is a 5:1 JPEG (*i.e.*, 80%) FTI was unable to demonstrate side-by-side viewing of the compressed and original images	Data compression is a 10:1 JPEG (i.e., 90%) FEs sighted minor differences in the compressed and uncompressed images, but believed the losses to be insignificant
d. Level of detail captured in the original imaging process	Adequate	Adequate

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Interface Compatibility was measured by noting bullet or cartridge size limits, interface between the CCD camera and the microscope, hardware requirements adherence to industry standards, and calibration and quality assurance procedures.		
a. Bullet or cartridge size limits:	Only calibers between 25 Autos and 45 Autos were tested.	Same.
b. Interface between the CCD camera and the microscope.	Excellent	Excellent
c. Hardware conformance to industry standards:	Conforms to standards	Conforms to standards
d. Software conformance to industry standards:	Conforms to current industry standards, but the software design and implementation are poor; software includes a *closed custom* database with no data exchange capabilities; non-multitasking system software.	Conforms to current industry standards. The software design and implementation are well done
e. CCD camera calibration and quality assurance procedures	No calibration, no established QA/QC.	No calibration, no established QA/QC.
f. Minimum evidence requirements:	Must be able to define 1 land impression.	Not adequately tested

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Network Compatibility was measured by network robustness, networking hardware requirements, and software and database security requirements		
a Network functionality:	Poor. Software requires operator intervention at sending and receiving ends to effect all network transfers; only one network operation is possible at a time.	Excellent. State-of-the-art, real-time video comparison and text dialogs between multiple clients, and e-mail.
b Networking hardware requirements:	Requires standard 14.4 kB dial-up modem for WAN operations, optional DES	LAN is built-in. WAN requires an external terminal server, dedicated telephone line, 56 kB modem, optional DES.
c Software and database security requirements	Requires Novell NetWare-Light software for LAN and WAN operation; poor security arrangements due to the single user password for all users	Excellent network security; separate ID and password for each user, system administrator, and database administrator; users are not allowed access to the UNIX™ operating system.
d System and network administration procedures and backup	All backups are manually initiated. No other system administration was specified	Daily backups are automatic. Full system backup requires operator to change tapes. System administrator must add and delete all users. Non-catastrophic failures can be handled over the network

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Human Factors was a quality measurement of man-machine interface limitations, technician qualifications requirements, technician training requirements, ease of sample processing, specimen handling procedures, operator bias in data acquisition and sample matching, and customer support access.		
a. Man-machine interface limitations:	Operator must re-focus attention between two video screens; GUI is easy and fast to learn and operate; several functions are mouse driven; mouse *can not* be used during high resolution video image comparison, ergonomics are very good.	Operation on single screen/single station, system is easy to learn and operate; visual and audio prompts, specimen mounting and adjustment procedures are contorted; algorithm score numbers are confusing; small video image size could mask potential matches, video image comparison is excellent; ergonomics are very good
b. Technician qualifications requirements (expertise, education, manual dexterity, etc.)	Suggested: AA degree, approximately 120 hours of varied classes, computer familiarity, visual acuity, and form perception.	Same
c. Technician training requirements to include formal classes and on-the-job training.	Suggested: DAS operator: approx. 32 hrs of a firearms safety class, 40 hrs of basic firearms identification training, 40 hrs of system training; SAS operator: 20 day training session on the DAS/SAS	Same level of training

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Human Factors *(continued)*		
d. Operator bias in data acquisition:	With the exception of defining LEA widths, the system was reasonably tolerant to operator bias	With the exception of centering the image, the system was reasonably tolerant to operator bias
e. Operator bias in sample matching:	Operator can define selection criteria based on image correlation scoring values; scoring data is displayed in tabular form which may lead to operator fatigue & errors	Operator may be subject to fatigue and eye strain, misaligned or rotated images may cause problems; operator is not adversely affected by the ranking system, images presented in rank order
f. Customer support access.	Currently adequate; user groups established to help identify future system hardware and software upgrades; user must pay for all hardware and software upgrades; no mechanism exists to insure that all BP cites are running identical versions.	Currently good, user groups established to help identify future system hardware and software upgrades, free software upgrades insuring uniformity throughout the user base, user must pay for commercial software upgrades

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Environmental Limitations was a qualitative measure that took note of special environmental requirements, hazardous materials handling requirements, and hazardous materials disposal requirements		
a. Special environmental requirements:	May require air conditioning for operator comfort.	Same
b. Hazardous materials handling and disposal requirements:	None	None
Facilities was qualitative measure that noted space requirements, special facilities features requirements, and hardware/system security requirements.		
a. Space requirements:	DAS/SAS require approximately 10' X 15' (150 square feet)	Server and client can fit on a large desktop table approximately 4' X 5' (20 square feet)
b. Special facilities features requirements	Two (2) separate 115 Volt, 15 Ampere, 3 wire dedicated circuits.	One (1) 115 Volt, 15 Ampere, 3 wire dedicated circuit
c. Hardware and system security requirements	To prevent unauthorized hardware and software access, the system must be located in a physically secure room	To prevent unauthorized hardware access, the system must be located in a physically secure room, no special requirements are needed to protect the DF software

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Expandability was a qualitative MOE which was measured by type of computer(s) and its ability to accept additional software, automatic image correlation as part of the data acquisition process, ability of system to process other firearms evidence, pre-planned product improvement programs, ability of the system to exchange data and imagery with other sources, ability to accept future hardware updates, and ability to interface with other computer systems.		
a Ability to accept other software:	Abundance of software is available for PCs, but not compatible the with current configuration of BP software; incorporating new algorithms is feasible, but must be custom integrated with the software.	Abundance of software is available for Sun Workstations, all this software should be compatible with current DF system
b Automatic image correlation as part of the data acquisition process	Not feasible under the current software	Currently not available, but could be easily implemented
c Ability of system to process other firearms evidence	Hardware is capable of processing other firearms evidence, FTI is developing a cartridge case imaging system named BrassCatcher™ which is scheduled for release in October, 1994	Hardware and software is capable of processing and storing other types of forensic data Sybase is SQL compatible allowing the database to be easily modified
d Pre-planned product improvement programs	Re-evaluation of the computer system architecture, including hardware and software, is currently ongoing at FTI, continued development of fully automated data acquisition system, and matching algorithm, planned release of BrassCatcher™, a cartridge case matching system, scheduled for release in late 1994.	Continued development of the matching algorithm, targeted 1 software upgrade release each quarter, product improvement agenda driven by steering committee, user groups, and available funding

Measure of Effectiveness (MOE)	BULLETPROOF®	DRUGFIRE™
Expandability *(continued)*		
e. Ability of the system to exchange data and imagery with other sources.	Can not directly exchange data and imagery with other sources.	Can exchange data with other systems through Sybase ASCII flat files and other UNIX™ based commercial software packages.
f. Ability to accept future hardware updates.	Can accept PC hardware and peripheral equipment upgrades; architecture is modular making such hardware upgrades relatively simple; numerous lines of assembly code may require modification for certain upgrades.	Can accept future hardware and peripheral equipment upgrades; Sun SPARCstation™ 10s can readily incorporate multiple processors; system architecture incorporates standard SCSI devices and ports.
g. Ability to interface with other computer systems	Additional hardware and software is required to access non-DOS systems	Standard communication is possible with all other system architectures

Journal Review

Journal of Clinical Forensic Medicine
Churchill Livingston Journals, Edinburgh, UK
ISSN 1353-1131
Subscription Rate: Variable
(telephone: 027-962-3760 for information)

The *Journal of Clinical Forensic Medicine* is a peer-reviewed journal intended to disseminate information of interest to forensic scientists, forensic pathologists, physicians, medical examiners, and other individuals associated with forensic medicine. Its approach is multidisciplinary, with emphasis on case reports and articles concerning the examination and handling of criminal matters with a forensic medical perspective.

Original articles are presented in a format consistent with traditional peer-reviewed journals. Review articles are commissioned by subject area experts to discuss particular aspects of specific disciplines and offer contrasting viewpoints on controversial issues. The articles are well-referenced and provide clear illustrations.

Case reviews and case reports address pertinent medical and legal questions and offer useful information relevant to situations that are likely to be encountered by forensic medical professionals. Literature citations, book reviews, meeting reports, and a calendar of forthcoming professional meetings and conferences are also featured. Literature citations summarize articles recently published in other forensic journals and are valuable for individuals who may not have access to these journals.

The *Journal of Clinical Forensic Medicine* provides a forum for forensic specialists to share original ideas, research projects and results, and interesting case reviews and case reports in a timely manner. It seeks to become an international vehicle for the discussion of new methods and approaches to dealing with the complex and expanding fields of forensic medicine.

Reviewed by: John L. Mertens
Federal Bureau of Investigation
Washington, DC

Editor's Note

I am very pleased to be joining the staff of the *Crime Laboratory Digest* as the new editor, and I would like to thank Colleen Wade for her valuable contributions while serving as the managing editor. Denise K. Bennett has now assumed the role of managing editor.

Bruce Budowle

CRSE and MPFSL Reports

Copies of the following Central Research and Support Establishment (CRSE) Reports and Metropolitan Police Forensic Science Laboratory (MPFSL) Reports are available for all duly authorized crime laboratories. To obtain copies of the reports, forward a written request to the following address. Supplies are limited, and all requests must be received by July 31, 1995.

Federal Bureau of Investigation
FSIRS Librarian, Room 3790
10th Street and Pennsylvania Avenue, NW
Washington, DC 20535
(telefax: 202-324-4323) (internet: cwade@capcon.net)

Detection of P30 and 19-OH Prostaglandin F1 Sperm Human Semen Markers in the Presence of a Range of Possible Casework Contaminants by Enzyme Linked Immunosorbent Assay (ELISA): Blind Trial Results
Sutton, J. G.
CRSE Report #760

UK Caucasian Database for TBQ7 (D10S28) Locus Derived from Blood Samples Submitted for Paternity Analysis
McDonald, A. J.
CRSE Report #761

Detection of Linearised Plasmid DNA Using a Fluorescent Dye YOYO-1 in Agarose Gel Electrophoresis
Faulkner, K. J.
CRSE Report #762

Further Observations on Glass Evidence Interpretation
Evett, I. W.
CRSE Report #763

Review of Methods and Practices for the Enhancement of Footwear Impressions
Allen, [illegible]
CRSE Report #764

Harwell Matchfinder: A Chromatographic Profile Matching Program Part II: The Visual Comparison of Complex Chromatograms and the Use of Matchfinder to Discriminate Between Closely Related Chromatograms
Willson, D.
MPFSL Report #93

Free Standing Cabinet for Cyanoacrylate Fuming
Stokes, M.
MPFSL Report #94

Arterial Pump: A Device for Simulating Arterial Bleeding
Stokes, M.
MPFSL Report #95

Employment Opportunities

Forensic Examiner (Latent Prints)

Salary Range: $28,379 – $39,733 per year

Qualifications and Experience: Applicants must have a bachelor's degree in criminology, administration of justice, or a related field. Certification by the International Association for Identification (IAI) is required and automated fingerprint identification system (AFIS) training and experience is preferred. An equivalent combination of education and experience may be considered.

CONTACT:
Gary McCormack
City of Wichita
455 North Main Street
Wichita, KS 67202
Telephone: 316-268-4331

EQUAL OPPORTUNITY EMPLOYER

Questioned Documents Examiner

Salary Range: $40,768 – $46,425 per year

Qualifications and Experience: Applicants must have a bachelor's degree in any field and 2 years of apprenticeship under the supervision of an American Board of Forensic Document Examiners (ABFDE) or American Society of Questioned Document Examiners (ASQDE) certified examiner and 2 years of experience work experience in a forensic document laboratory. Certification by ABFDE is also required.

CONTACT:
[illegible] Police Department
[illegible] Employee Relations
[illegible] Jensen Parkway
[illegible], UT 84088
[illegible]
[illegible]

EQUAL OPPORTUNITY EMPLOYER

Latent Print Examiner II

Salary Range: $31,803 – $45,219 per year

Qualifications and Experience: Applicants must have an associate's degree or at least 60 accredited semester hours in criminalistics or a related field plus 3 years of experience involving both inked and latent fingerprint classification work in a law enforcement environment, supplemented by formal training in latent fingerprint, photography, and other police identification techniques. Applicants also must be court-qualified as an expert witness.

Latent Print Examiner III

Salary Range: $33,530 – $47,570 per year

Qualifications and Experience: Additional requirements include a bachelor's degree and certification by the International Association for Identification (IAI).

CONTACT:
Frank J. Rodgers
Phoenix Police Department
620 West Washington Street
Phoenix, AZ 85003-2187
Telephone: 602-262-6947
Telefax: 602-534-4029

EQUAL OPPORTUNITY EMPLOYER

Criminalist (Trace Evidence)

Salary Range: $28,008 – $42,012 per year

Qualifications and Experience: Applicants must have a bachelor's degree from an accredited college or university in chemistry, criminalistics, or forensic science plus 2 years of experience in the examination of trace evidence, including glass, paint, and fibers.

CONTACT:
Frank Shiller
Police Department Crime Laboratory
350 West Belknap Street
Fort Worth, TX 76102
Telephone: 817-877-8084
Telefax: 817-877-8202

EQUAL OPPORTUNITY EMPLOYER

Criminalist II (Trace Evidence)

Salary Range: $37,579 – $52,892 per year

Qualifications and Experience: Applicants must have a bachelor's degree in chemistry plus 3 years of forensic chemistry work experience which includes the examination of glass, paint, fibers, soils, flammables, and other trace evidence. Applicants must be court-qualified as an expert witness in trace evidence analysis. Knowledge of the rules of evidence is essential.

CONTACT:
Broward County Sheriff's Office
Personnel Division
2601 West Broward Boulevard
Fort Lauderdale, FL 33312
Telephone: 305-321-4400)

EQUAL OPPORTUNITY EMPLOYER

Senior Criminalists (Latent Prints)

Salary Range: $31,226 – $41,181 per year plus benefits

Qualifications and Experience: Applicants must have a bachelor's degree in chemistry, criminalistics, chemical engineering, metallurgy, forensic science, a biological science, or a related field plus 3 years of experience as a laboratory criminalist. An equivalent combination of education and experience may be considered, and some of the six available positions may be underfilled as a Criminalist I or Criminalist II.

CONTACT:
Lois Ray
Oklahoma State Bureau of Investigation
PO Box 11497
Oklahoma City, OK 73136
Telephone: 405-848-6724)
Telefax: 405-842-0675)

EQUAL OPPORTUNITY EMPLOYER

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If there are no changes in your current name, agency, or address, it is not necessary to return this form.

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Forward this completed form to: Denise K. Bennett
Managing Editor
Crime Laboratory Digest
FSRTC, FBI Academy
Quantico, VA 22135

Meeting Announcements

1995

May 8–12 **Joint Meeting of the Northwest Association of Forensic Scientists (NWAFS) and the Alaska Peace Officers Association** at the Hilton Hotel in Anchorage, AK. For further information, contact George Taft, Director, Scientific Crime Detection Laboratory, 5500 East Tudor Road, Anchorage, AK 99507 (telephone: 907-269-5740 or telefax: 907-338-6614).

May 10–12 **Annual Meeting of the Mid-Atlantic Association of Forensic Scientists (MAAFS)** at the Fair Oaks Holiday Inn in Fairfax, VA. For further information, contact Eileen Davis, Virginia Division of Forensic Science, Northern Laboratory, 9797 Braddock Road, #200, Fairfax, VA 22032 (telephone: 703-764-4600 or telefax: 703-764-4633).

May 10–13 **85th Semi-Annual Seminar of the California Association of Criminalists (CAC)** at the Walnut Creek Marriott Hotel in Walnut Creek, CA. For further information, contact Karen Sheldon, Contra Costa County Sheriff-Coroner's Department, 1122 Escobar Street, Martinez, CA 94553 (telephone: 510-646-2455 or telefax: 510-646-2913)

June 5–9 **26th Annual Training Seminar of the Association of Firearm and Tool Mark Examiners (AFTE)** at the Bahia Hotel in San Diego, CA. For further information, contact James Roberts, Los Angeles Sheriff's Department, Firearms Identification Unit, 2020 West Beverly Boulevard, Los Angeles, CA 90057 (telephone: 213-974-4628 or telefax: 213-413-7637)

September 26–30 **42nd Annual Meeting of the Canadian Society of Forensic Science (CSFS)** at the Delta Chelsea Inn in Toronto, Ontario, Canada. For further information, contact Dr. Joel Mayer, Centre of Forensic Sciences, 25 Grosvenor Street, Toronto, Ontario, Canada M7A 2G8 (telephone: 416-314-3159 or telefax: 416-314-3181)

October 5–7 **Joint Training Conference of the International Association of Bloodstain Pattern Analysts (IABPA) and the Association of Crime Scene Reconstruction (ACSR)** at the Meridian Plaza Hotel in Oklahoma City, OK. For further information, contact Captain Thomas Bevel, Oklahoma City Police Department, 701 Colcord Drive, Oklahoma City, OK 73102 (telephone: 405-297-1225 or telefax: 405-297-1360) or Michael Dixon, Oklahoma State Bureau of Investigation, PO Box 1727, Enid, OK 73702 (telephone: 405-242-2600 or telefax: 405-234-8707)

October 15–21 **Joint Meeting of the Midwestern Association of Forensic Scientists (MWAFS) and the Southern Association of Forensic Scientists (SAFS)** at JR's Executive Inn in Paducah, KY. For further information, contact Glenn Schubert or Grace Johanson Lively, Southern Illinois Forensic Science Centre, 606 East College Street, Carbondale, IL 62901 (telephone: 618-457-6714 or telefax: 618-457-4676)

October 16–20 **Fall 1995 Meeting of the Northwest Association of Forensic Scientists (NWAFS)** at the Ashland Hills Inn in Ashland, OR. For further information, contact Wayne Ferguson, National Fish and Wildlife Forensics Laboratory, Serology Section, 1490 East Main Street, Ashland, OR 97520 (telephone: 503-482-4191 or telefax: 503-482-4989)

October 18–21 **86th Semi-Annual Seminar of the California Association of Criminalists (CAC)** at the Sheraton Harbor Hotel in Los Angeles, CA. For further information, contact Joe Hourigan or Larry Blanton, Los Angeles Police Department Criminalistics Laboratory, 555 Ramirez Street, Space #270, Los Angeles, CA 90012 (telephone: 213-237-0058 or 213-237-0061 or telefax: 213-237-0040)

October 26–28 **21st Annual Meeting of the Northeastern Association of Forensic Scientists (NEAFS)** at the Mystic Hilton in Mystic, CT. For further information, contact Donald Doller, Suffolk County Crime Laboratory, Suffolk County Office Building #487, Hauppauge, NY 11787 (telephone: 516-853-5585 or telefax: 516-853-5739)

Mr. WATT. Let me go on to the next very pointed question that I want to ask. One of the concerns I had, and continue to have, is that there is a potential for the creation for what I would call a DNA profile of a criminal. I want to be assured that our Federal Government is not in the business of creating that profile. We've created profiles for folks that we stop in airports to search and frisk and make further inquiry of, for drug offenses, a little incursion further into our individual rights and privacy and liberty. I want you to ensure me, if you will—or if you can't, tell me what we are doing—is the Federal Government in the process of creating a criminal profile from this DNA information that we are collecting?

Mr. AHLERICH. Absolutely not. I can give you that assurance, and I'm pleased to do that, and certainly that's a valid concern. What we are collecting are simply identifying features that are contained in the DNA information——

Mr. WATT. Can I ask one more question?

Mr. MCCOLLUM. One more brief question, Mr. Watt.

Mr. WATT. Brief question. Are you requiring in these grants that we make to the States that they not use any of this money to experiment with or create such a criminal profile?

Mr. AHLERICH. I cannot answer that specifically, but I do not see how the data or the technology would allow for the development of that. This is simply identifying——

Mr. WATT. Not yet.

Mr. AHLERICH. In my experience, in my knowledge, I do not understand how that could even be developed.

Mr. WATT. Thank you. Mr. Chairman.

Mr. MCCOLLUM. Thank you, Mr. Watt.

Mr. Chabot, you're recognized for 5 minutes.

Mr. CHABOT. Thank you, Mr. Chairman. I'll try not to take all that time. I just have one question basically, or actually two, for Mr. Di Gregory.

I appreciate your testimony on H.R. 1552 and your support for at least the first part of the bill and your suggestion regarding the U.S. mail provisions. As Mr. Wynn and I indicated, we favor narrowing that second part of the bill by adding a commercial purpose requirement. I also think that Mr. Scott had some good suggestions in the hearing, and particularly that area about whether the ID's—or in that person's name or other people's names, I think that is something we need to investigate further.

Let me ask you a question. Apparently, one group is suggesting that H.R. 1552 somehow runs afoul of the *Lopez* decision, but the change of the number five to the number three does not have any commerce clause significance here, I wouldn't think, does it?

Mr. DI GREGORY. Well, with—I wouldn't think it would either. I couldn't give you a definitive answer on that, but my gut sure is that reduction in number would not make a difference.

Mr. CHABOT. OK. And then, finally, there is no doubt, is there, that Congress cannot regulate the use of the U.S. mails without violating the commerce clause?

Mr. DI GREGORY. Again, without going back into Lopez and looking at what possible implication it could have for this, my reaction is, no, I don't think there's—no, I don't think there's any doubt that

Congress can regulate the use of the United States mails, but I'd want to hold on an absolutely definitive answer.

Mr. CHABOT. OK. Thank you very much.

And then, finally, Mr. Chairman, I would ask unanimous consent to insert into the committee record written testimony submitted by the Honorable John Long, who is the chairman of the Century Council and he is a former Director of the DEA, the Drug Enforcement Administration. And I also ask that the record be held open for 10 days so that other interested parties might submit written testimony.

Mr. MCCOLLUM. Without objection, it is so ordered.

[The prepared statement of Mr. Long follows:]

PREPARED STATEMENT OF JOHN C. LAWN, CEO, THE CENTURY COUNCIL

Mr. Chairman and Members of the Subcommittee, I am Jack Lawn, chairman and chief executive officer of The Century Council. The Century Council appreciates this opportunity to address the Subcommittee and to give the Council's full support to H.R. 1552, the False Identification Act of 1995, introduced by Representative Steve Chabot of Ohio. Representative Chabot should be commended for introducing this bill and taking a leadership role in the effort to prevent illegal underage drinking.

The Century Council is a national, not-for-profit organization dedicated to reducing alcohol abuse—specifically underage drinking problems and drunken driving. It is supported by more than 900 concerned distillers, vintners, brewers and wholesalers. A listing of the Council's members, including the founding members and the board of directors, is included in supplemental materials submitted for the record.

Since 1991, we have been carrying out many anti-abuse educational, enforcement and legislative programs in the public and private sectors nationwide. We do so always in partnership with other organizations and individuals who share our mission. We are honored to count among our programs' allies Members of Congress, governors, state legislators, mayors, police chiefs, the National Commission Against Drunk Driving, state and local chapters of Mothers Against Drunk Driving, representatives of the insurance and health care industry, and state and local alcohol beverage wholesalers and retailers.

To fight the use of false IDs by teens to try to buy alcohol, the Council has created and operates two major programs nationwide and a special program in Eugene, Oregon. Our point-of-sale educational campaign, "Front Lines," is in place in every state and in Washington, D.C. Our innovative "Cops in Shops" program has been implemented in the Washington, D.C. area and in many cities across the country. In both programs, we have had the full participation and cooperation of state and local alcohol wholesalers and retailers and law enforcement. In Eugene, Oregon, a Century Council Coalition and the Lane County District Attorney's office have teamed up to put an end to the production of counterfeit IDs by offering awards of up to $500 to anyone providing information leading to the arrest and conviction of false ID makers. In conjunction with the reward program, Project Eugene has entered its third year of implementing the "Cops in Shops" program.

These efforts—plus our teen and parent educational programs to combat underage drinking problems in general—are summarized in greater detail in the attached materials submitted for the record.

The Council's initiatives are successful at preventing alcohol use by minors because they are aimed at many levels: at the front lines, the retail counter where alcohol is sold, the home, the church, the school, and the community, where teens learn and form attitudes about alcohol. We support Representative Chabot's proposed legislation because it goes beyond such efforts and strikes pre-emptively and powerfully against the criminals who make false IDs available to young people in the first place.

H.R. 1552 would set criminal penalties for knowingly sending false identification documents through the mails and would lower the threshold for establishing a violation of federal laws prohibiting fraud in connection with identification documents. This legislation would be a major step forward in combating illegal underage drinking problems.

Whether they are document mills advertising in the back pages of obscure magazines or misguided entrepreneurs operating on a college campus, these criminals are responsible for the flood of false IDs—primarily drivers licenses—encountered by retailers and police officers every day. One study reported that 40 percent of college

students said they had used a false ID to purchase alcohol. A Surgeon General's study reported that 45 percent of all students knew someone who used a false ID to buy alcohol.

The most stringent efforts by retailers to detect and refuse these false IDs are frustrated by the skill of many manufacturers. In working with retailers and law enforcement in many cities, Council staff members have seen false drivers licenses that are indistinguishable from real ones—even to the most expert eye. As a career FBI official and former administrator of the Drug Enforcement Administration, I can speak first hand about how diabolically talented these false ID crooks can be.

Americans can be proud of the progress we've made against underage drinking problems. The number of high school seniors reporting daily alcohol use has declined more than 50 percent from 1979 to 1994. The number reporting binge drinking in the previous two weeks has dropped 13 percent since 1980 and the number reporting alcohol use in the last month has declined 22 percent. Alcohol-related crash fatalities among drivers under 21 has dropped 53 percent from 1982 to 1994. But serious problems remain. By supporting our work, the alcohol industry subscribers to The Century Council demonstrate their opposition to any illegal purchase, attempt to buy, possession or use of their products by those under 21.

Enactment of Representative Chabot's false ID legislation would be a landmark advance in the fight against underage drinking problems. Thank you for considering our views.

Mr. CHABOT. Thank you very much. I yield back the balance of my time.

Mr. MCCOLLUM. Mr. Barr, you are recognized for 5 minutes.

Mr. BARR. Thank you, Mr. Chairman.

I have enjoyed the testimony. I am sorry that I've missed the testimony of my distinguished colleagues on the subcommittee earlier today. We had markup of legislation in the Veterans' Committee that required my attendance, and I apologize for running late and not hearing the entire testimony today, but I have benefited from the questions and answers here in reviewing this material. And I do look forward to working with Mr. Chabot on 1552.

As I understand from the just concluded comments, there will be some revisiting of some of the language in section 3 of the bill, and I look forward to that process. But I appreciate the panelists today. I found it very valuable and yield back the balance of my time.

Mr. MCCOLLUM. Thank you very much, Mr. Barr.

I believe that concludes the questioning for this panel for today. I want to thank you for coming. You've certainly given us base for doing it——

[Mr. McCollum confers with staff.]

Mr. MCCOLLUM. Counsel is advising me to ask you a question, which I'm certainly willing to do. Mr. Kane, if you could respond to the National Association of Criminal Defense Lawyers, and the concerns they are going to be expressing today in their testimony. There's a whole lot of it in here about things related to the death penalty question. It would be helpful to us if you could submit a response to that as a part of giving us the thoughts that Mr. Schumer was asking for a response for, too.

Mr. WATT. Mr. Chairman, I also ask for some responses from the FBI, and wondered in what time frame——

Mr. MCCOLLUM. Well, we want to try to do this pretty quickly; that's why I made this point. The intent of the committee is to mark up these bills somewhere shortly after we return from the recess. So, if these responses can be collected, and if there are problems with any of the requests being complied with in a really short time, let us know. I know you may not have it with you, but we will give you a copy of it.

[See appendix.]

Mr. MCCOLLUM. I want to thank again the panelists.

Mr. Di Gregory, did you have something else you want to add?

Mr. DI GREGORY. Yes, one thing that I forgot to mention, Mr. Chairman. We have a suggested change to the language in 3596 which would ensure that it was retroactively applied to all Federal death sentences imposed but not yet implemented, which would also, if it refers to U.S. district court, insure against the misapplication of the provision of death sentences imposed by the military courts. And I can share that language with——

Mr. MCCOLLUM. Please do because I think that is important. Mr. Bryant and I have both been military JAG's, so we appreciate that fact. I believe that—Mr. Scott.

Mr. SCOTT. Will the gentleman be here through the testimony of other witnesses?

Mr. MCCOLLUM. I do not know if he can stay for that or not. We have not requested that.

Mr. DI GREGORY. I am unable to.

Mr. KANE. I'm also unable to.

Mr. MCCOLLUM. We're going to provide the written testimony. There is a copy of it available; that's why I asked for the response to it.

Thank you very much for coming. We appreciate it.

Our last panel today does consist of two witnesses who will comment to us from entirely different perspectives. I do not have their biographical material, but I'm going to introduce them today. If you would come forward, gentlemen.

W. Mark Dale is president of the American Society of Crime Laboratory Directors, and William Moffett is a member of the board of directors of National Association of Criminal Defense Lawyers. If you would come forward, we would certainly appreciate it.

Oh, Mr. Moffett's not here; it's Marvin Miller, director of the National Association of Criminal Defense Lawyers. And he has practiced criminal defense law for over 25 years and has a national practice based in Alexandria, VA.

I've got to get my editorial changes down right here.

Mr. MILLER. If people didn't make mistakes, there would be no need for lawyers.

[Laughter.]

Mr. MCCOLLUM. Thank you very much for coming.

We've got complete substitutes here, I'll tell you.

[Laughter.]

Mr. MCCOLLUM. Mr. Richard Tanton is actually here today with us, director of the Palm Springs Sheriff's Department Crime Lab and past president of the American Society of Crime Laboratory Directors.

I see three different pieces of paper, gentlemen. Staff is going to really get it from me for this—relatively minor offenses, but, nonetheless—zero to what should they get?

[Laughter.]

Mr. MCCOLLUM. All right, if we could, I believe I did introduce the Society of Crime Laboratories first; I'm going to ask Mr. Tanton if you would proceed to give us your testimony.

Mr. WATT. Can we know——

Mr. MCCOLLUM. Just the two of them. Mr. Miller represents the criminal defense lawyers; Mr. Tanton represents the crime laboratories directors. I got that part right, I think.

Mr. Tanton, please proceed.

STATEMENT OF RICHARD L. TANTON, DIRECTOR, PALM BEACH SHERIFF'S DEPARTMENT CRIME LAB, AND PAST PRESIDENT OF THE AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS

Mr. TANTON. Well, thank you, Mr. Chairman. I appreciate the opportunity to be here. Mr. Mark Dale who is the current president of the American Society of Crime Laboratory Directors, or what we call ASCLD, asked me to appear today in his stead.

When I was president back in 1990, I was involved in providing information for the original legislation for the DNA Identification Act.

One small correction, Mr. Chairman, which I think you'll appreciate: I'm not from Palm Springs; I'm from Palm Beach in Florida.

Mr. MCCOLLUM. I definitely appreciate that. If you're from Palm Beach, you've got an entire part of the world from my end.

[Laughter.]

Mr. TANTON. Also, today I'm here representing the American Society of Crime Laboratory Directors/Laboratory Accreditation Board, and this is a separate entity that is concerned with the quality of analysis produced by a crime laboratory. They have an accreditation program specifically designed for that.

The issue, as I understand it, here today is not an amount of money, but when it will become available. What I would like to do in representing those organizations is to talk to you about the urgency of financial support that we face right now.

Five or six years ago when the FBI was taking the lead in DNA identification and trying to get a viable analysis, we as crime laboratory directors at a meeting similar to this one we are at now, were asked to get together and draft a letter of support for the efforts that the FBI was engaged in. We gathered together 15 people of good intent and good character, but who approached this from different directions. And I'm assuming that you gentlemen have been in that situation before. After about 2 hours, we decided to write down what it is that we could all agree upon about DNA, and we came up with DNA is good.

And, gentlemen, DNA is much better than it was those 5 years ago. The problem is, I think, almost an embarrassment of riches. It's become too good. And now, accelerated by this national exposure and posited by the results in this nationally televised trial, we project will have to, and are in fact under the gun to, provide this analysis and make it much, much more available and rapidly. This is the problem that we have. The FBI is certainly strained by the requirements of their laboratory to provide the amount of DNA analyses that are required.

What we need is to move this technology out to the State and local laboratories under the highly supervised, quality assurance mechanism which is included in the bill. The DNA Advisory Board is currently working on providing standards for the eligibility for this money. So, through that mechanism, we need to get this fund-

ing out to the State and local laboratories so they can provide these analyses locally.

A second issue and Mr. Watt, I understand has taken issue with this, but that is the concept of a data base. And 40 States have convicted offender data bases in which their blood standards are put in the data base. But, at this point, the only time that the appropriate cases would be analyzed, and we could apply those results to the data base, is if we work the cases which have no suspect. However, cases without suspects are typically not prioritized. And currently within the process, most of the laboratories that are doing DNA don't have the capacity to analyze every case that comes in. We need to do those cases to take advantage of the data bases.

Those are the two issues that I think that argue for allocating this money as soon as possible, so that we can fulfill these obligations and the demands that are certainly going to continue to be placed on us.

Mr. MCCOLLUM. I think you expressed that very well, Mr. Tanton, and we thank you for coming today to put that on the record.

Mr. Miller, from the defense lawyers' perspective, now that I have gotten around to the right introduction, I hope, please let us hear from you.

STATEMENT OF MARVIN D. MILLER, DIRECTOR, NATIONAL ASSOCIATION OF CRIMINAL DEFENSE LAWYERS

Mr. MILLER. Thank you, Mr. Chairman, members of the committee. I'm Marvin Miller from the National Association of Criminal Defense Lawyers. We would like the materials that we submitted to be included in the record. We need to make a couple of amendments, and if that would be acceptable——

Mr. MCCOLLUM. Without objection.

Mr. MILLER. Thank you very much, Mr. Chairman.

I'm going to primarily focus on H.R. 1552 regarding identification, and then H.R. 2359 regarding the death penalty issue on where inmates are going to be after conviction and pending sentence implementation.

On 1552 regarding the ID issue, the purpose allegedly put forward in the bill is to deal with underage drinking. And what I was hearing a little bit from justice, and what I gleaned from the submission that they presented to you, that even they recognize that there are some problems with the current bill. And far be it from me to admit in public that I agree with them on some things, but once in a while we do.

[Laughter.]

Mr. MILLER. *U.S.* v. *Lopez* was mentioned in the remarks from my colleagues a moment ago, and I think it does have an impact. This bill is not intended to protect the U.S. mails. It's not intended to protect Federal Express, UPS, or any of the other services that deal with that. What it does is it lowers a standard and makes it less likely that you are dealing with something that affects interstate commerce. When you changed the speed limit law, I think it was last week and—which then I believe also made it possible for the States to adopt their own drinking age limits, 18, 21, whatever they want to do. Let's say you have a State that goes back to be-

fore, when there was a mandatory speed limit on a national level, in order to get State funds, let's say you do that, and one State has an 18, and another one has a 21, and a kid from 18 goes to college at a school where the limit is 21, and he wants to create a fake ID on a copy machine for himself and his girlfriend to go out on a date. You don't have to have anything to do with interstate commerce to make fake ID's. All you need is a color photo copier. And this is, you know, a time when Congress is talking about, "Let's let the States deal with State issues, let's get our hands off the backs of individuals, and let's lower it."

You're not lowering anything. You're making Federal crimes out of a college kid with a fake ID to get some beer, or bourbon, or whatever. By lowering the numbers, you are creating the likelihood that it's a less sophisticated operation. So a person has a Social Security card, a driver's license, and a university ID, three. Well, now they're a Federal criminal, and if mamma mails the wallet that junior left at home to him in college, she's a Federal criminal. So, you're increasing Federal crimes on an issue that doesn't have anything to do with what is or ought to be your focus.

If you wanted to deal with frauds that affect interstate commerce, then say so in plain English. If you wanted to deal with immigration issues, then say so in plain English. You gentlemen are masters of our language. You can say that. But that's not what you've written. And you ought to know that there are prosecutors who will take this statute and apply it to a college kid, rightly or wrongly. Not all prosecutors do everything correctly. And if they did, then we wouldn't have to have the adversarial system. They're people the same as I am. I make mistakes; they make mistakes. They sometimes abuse their position. These kinds of things can happen. You need to draft language that deals with interstate commerce issues.

Lopez expressed a concern of the Supreme Court and many Federal courts that what's happening is Congress is not really trying to diminish the Federal Government; it's trying to make Congress pass all the rules that affect local State law enforcement issues. A very conservative prosecutor in the Commonwealth of Virginia, where I have been practicing for 25 years, can't believe the low level kinds of cases that now show up in Federal courts where they're taking and spending tens of millions of dollars on these task forces to take State cases and put them in Federal court because they feel that they can get more money for the local police department to have fancier cars and more pay for these guys, in order to try and transfer things into the Federal system and junk up the Federal courts with cases that don't belong there.

You have to look at what your purpose is. In practice, most of these deal with either major fraud cases involving credit cards across State lines, which is a legitimate Federal concern, or immigration. And that would be a proper exercise of your authority. But what I ask you to consider is putting in language that's what you really intend to do. You're making a bad thing worse. And I'm not sure that you intend to do that. I think it may be that you're not fully appreciative of the way the language can be applied. And what you do when you write, is you have an idea. Then it gets down to some lawyer somewhere—from a Justice Department office

some place—and they're going to say, "Aha, this is a way I can apply it and this is what I'm going to do, because this is what I feel is important for me in this particular case," which may not be what you wanted to happen at all.

So, if you can make yourselves more clear, if that's what you intend, I think you're doing well. If you don't, then you might be running afoul of the *Lopez* decision.

Now, a more significant issue, perhaps, is 2359 on the death penalty. And if you look at 18 U.S.C. 3596, the language that would be deleted by it that talks about being "in the Attorney General's custody until exhaustion of procedures of appeal and judgment and conviction and review of the sentence," now that's a major thing. If you move somebody to Terre Haute, IN, it's not the same thing as moving somebody to Jacksonville, FL, or in my State, down in Mecklenburg, VA. You're not talking about a 7-hour drive. You're talking about somebody from the Queens, or the Bronx, or barrio in Los Angeles who has a court-appointed lawyer paid for by taxpayers' dollars who got a death penalty who's now in Indiana. And you get a situation where a Federal judge realizes that that lawyer didn't call another eyewitness who said, "He didn't do it, he's not guilty. The guy who did it had a moustache and a beard, and everybody knows that this kid is clean-shaven and bald-headed." And the judge is concerned. So, he's going to appoint another lawyer because he can't appoint the same lawyer.

Let's say he appoints a white lawyer for an ethnic minority defendant who then has to be flown to Terre Haute, with taxpayer dollars, and put in a hotel for 2 or 3 days' worth of interviews, at greater taxpayer expense, to then go back to the court where the record is. Where is the record of the case? Where the trial occurred. Where is the record of the people that were subpoenaed and maybe not called? Or the record of exhibits that were filed and maybe not used? Or a record having to do with a juror? Where is that? That's in the trial court. Where is the appellate court? It's in the same area.

So you're cutting these people off. You're making the lawyer have to talk to the guy over a tape-recorded conversation. Or the guy might not have any confidence in lawyers. His first lawyer screwed up the case and didn't call somebody that was an eyewitness and said somebody else did it. And maybe it was an eyewitness from a better position.

That figure of 40 percent of State death penalty cases being overturned, they're not overturned on hypertechnicalities; they're a lot of innocent people who do get convicted. And you don't want to convict somebody who's innocent; I know you don't. And people make mistakes. And sometimes on a court-appointed lawyer basis, you do get somebody who is a little green. They're very bright, they're very aggressive, they've a big heart, they really would like to do well, but it may just be beyond their "can" because they haven't had the time to learn things. And then mistakes are made all the way around.

And there's a system to correct those mistakes, but if you move somebody to Indiana, and if you delete this language, that's the impact of it because then it's a Bureau of Prison decision. Then you're

saying, "We don't care whether you're innocent or not. That's not our concern."

You can't do it in a vacuum. You're shortening the time for habeas. How can you shorten the time for habeas and then make it harder to get in touch with the client? You can't do this in a vacuum. You have to look at the habeas bills that are now pending, and the time frames that are going to come out of those bills to determine what you are going to do. You have to look at the picture as a whole. There are human lives at stake.

We have a 200-year history that we'd rather have a guilty man go free then an innocent man suffer. We may be turning that on its end and rather have a guilty man get executed—I mean an innocent man get executed than a guilty man go free. I have problems with that. You ought to have problems with that. You've got to look at the impact of this.

What about the family? How is the family going to get there? From some place, some low income family in Boston to Terre Haute, IN, who's going to pay? Or somebody from some rural area in Arkansas or in Louisiana, how are they going to get to Terre Haute to see their loved ones? They're not. And you're not going to pay for it.

The issue of a uniform procedure isn't the problem. I remember in the Army you had FM–22-sweeping a broom. When I was in, it was the M–1; now it's the M–16 and the M–60. But whatever it is, you had FM–22-field manuals that told you how to do everything and anything. And, if you could read, and you had a high school degree or less, you could do it. So, procedures aren't the issue.

And if you turn it over to the Bureau of Prisons—not that they are evil people—but they have their own institutional concerns. They are a bureaucratic organization. Security is their first bugaboo and their main thing. They're not—they will say, "Yes, we're concerned about the access of the inmate to lawyers and courts," but that's their lower priority because they have a different mission. So you have to make sure that when you enact legislation, that you don't deprive the individual the right in many cases to establish their factual innocence. And that takes time, and that takes access.

If you have an appellate court that sends a case back because they need a hearing, how are you going to have a hearing? Are you going to fly the inmate or have him done by bus from Terre Haute back to the Federal court where the trial occurred? And then you're going to have your hearing? And that's going to be an expensive and time-consuming matter.

And you're not going to have a special bar develop in Terre Haute, IN; that's ridiculous. You're not going to have that because there are few enough people that deal with these cases to begin with, and you're not going to have the resources for them to do that. You're cutting back on the resource centers on death penalty issues. Why? Not because they are a waste of money. Because they were uncovering—the reasons some prosecutors don't like them—they were uncovering innocent people getting convicted because in some occasions an overzealous police officer said something that wasn't true, and sometimes they did it intentionally. Those things happen in real life because the system isn't perfect. And here is a

ready-made advocate dealing with the issue on a tough level on a very important issue, and you're cutting the funding on that and isolating these people.

You have to understand, this is the United States, we are supposed to be fair. We're supposed to appear. We're not supposed to be afraid or ashamed of doing justice to the guilty. Maybe the guy robbed the store, and maybe he should go to prison, but maybe he shouldn't have gotten the death penalty. Those things happen, too.

You have to not be afraid to stand up for the beliefs that made us different and make us different. And you need to look at this in a totality, and I know that you will.

And I appreciate you giving me and my association an opportunity to address you on this issue because you have a very difficult job. You've got thousands of things tugging at you all the time and then little issues from your constituents that are big to them, and you've got to go in a thousand directions at once, and I don't know how you do it. But on this issue, don't rush. Take your time and look at it because the language that you're going to delete is going to make a bigger change than you perhaps realize.

Thank you.

[The prepared statement of Mr. Miller follows:]

PREPARED STATEMENT OF MARVIN D. MILLER, DIRECTOR, NATIONAL ASSOCIATION OF CRIMINAL DEFENSE LAWYER

RE: H.R. 1552 ("FALSE IDENTIFICATION ACT OF 1995")

1. "Cracking down" on under age drinkers (the stated intent of the sponsors of this bill) is a matter for the states

Congress is willing to trust the states with matters as important as welfare administration. It should be at least as willing to allow states to handle these run of the mill, traditionally state and local crimes.

2. Lopez

Specifically, the bill appears to flatly violate the United States Supreme Court's recent *Lopez* decision. *U.S.* v. *Lopez*, 115 S.Ct. 1624(1995).

In an age in which the federal courts are drowning in 3,000 "federal crimes," the *Lopez* decision reestablished, in a court and State-protecting way, that: (a) the federal government is one of enumerated and delegated powers under our Constitution, and that Congress cannot pass a statute unless there is authority in the Constitution for it; and (b) that there is no general police or welfare clause in the Constitution.

The *Lopez* decision makes it clear that even when Congress purports to be regulating activities affecting interstate commerce, and has inserted a Commerce Clause interstate jurisdictional component (e.g., use of the mails), Congress must prove more than that the activity affects interstate commerce "minimally." Congress must establish that the activity at which it aims has a *substantial effect* on interstate commerce. The placement of false "over-age" *i.d.* in the mail does not meet this test.

This bill does not seek to *protect or regulate the instrumentalities of interstate commerce.* This bill is fundamentally unlike laws aimed at prohibiting damage to airplanes or interfering with the interstate transmissions of radio signals, for example. Rather, this bill seeks to transgress the enumerated powers limitation of the Constitution and intrude upon the police prerogatives of the States. It seeks to provide for the *general welfare,* by *generally policing* the production and passing of very limited numbers of false age i.d.

Lopez made it plain that Congress may not enact "federal" criminal legislation in a way:

> Embrac[ing] effects upon interstate commerce so indirect and remote that to embrace them, in view of our complex society, would effectively obliterate the distinction between what is national and what is local and create a completely centralized government.

Lopez, 115 S.Ct. at 1628–29 (quoting *NLRB* v. *Jones & Laughlin Steel Corp.,* 301 U.S. 1, 37 (1937))

Unfortunately, H.R. 1552 would effectuate just the sort of obliteration of distinction decried by the *Court in Lopez. See e.g., U.S.* v. *Pappadopoulos,* 95 C.D.O.S. 6743 (9th Cir. (No. 93–10577) August 25, 1995) (Wallace, C.J.) (Following *Lopez,* and holding in particular that the arson of a private home has only a remote and indirect effect on interstate commerce, and the receipt of interstate gas does not establish a sufficient nexus with interstate commerce to satisfy *Lopez*). *See also e.g.* id., at concurrence of Judge Farris ("This case . . . does not qualify as an economic regulation. [The Act's prohibition] 'is not an essential part of a larger regulation of economic activity, in which the regulatory scheme could be undercut unless the interstate activity were regulated.'").

The underlying false identification statute—18 USC section 1028—is essentially focused on false identification documents in facilitation of *illegal immigration.* This is almost inevitably, if not exclusively, how the statute is invoked *in practice.* And this is a matter well within the proper function of the federal government, specifically, the federal criminal law. The quantity threshold requirement seeks to ensure a substantial, as opposed to minimal, interstate commerce-affecting element.

Lowering this threshold, especially in an attempt to "crack down" on an essentially state and local crime problem of *false age* i.d., contravenes *Lopez* and the properly limited purposes of the federal criminal law affirmed in that decision.

3. New Offense Provision in Particular

It is difficult to imagine a more flagrant violation of *Lopez* than the bill's proposed creation of an entirely new class of "federal" offense: the one-time mailing of a false i.d. of age. See above.

"Knowingly" what? It is also unclear to what act the term "knowingly" is meant to apply—to the simple mailing, or to the mailing of a known falsehood about age on an i.d.

This appears to be an attempt create a "strict liability" offense—in which simply mailing the i.d., whether or not one knew about its falsehood with respect to age, is the crime.

This compounds the error of the bill—making this sort of innocent act a "federal offense." It vastly increases the odds that one-time mailers of false age i.d. who have acted with entirely innocent intent will be swept into the "federal" criminal net.

The one-time mailing of a false i.d. "harm" at which the bill is aimed is certainly not of a degree or magnitude warranting creation of a federal strict liability offense.

4. Policy Arguments in Particular

This bill also implicates troubling policy issues.

First, the bill raises concern about arbitrary and capricious, selective enforcement. Will the Harvard undergraduate be prosecuted for the false age i.d. offense—plucked from the frat house and placed in the "big house"? Or will it only be the non-college student?

Second, the federal courts are suffering with overwhelming caseloads as it is. It is inefficient, unwise, and an abuse of the Third Branch to add this new offense to the list of 3,000 "federal crimes" already on the books. Congress's failure to heed Supreme Court law is an enormously costly, irresponsible, court-subverting enterprise. In a day of budgetary concerns, it certainly makes no economic sense. A *cost impact statement* should make this unmistakably clear.

Third, this is simply not the type of "harm" on which we should be expending scarce and costly federal prison space, and precious national tax dollars.

RE: H.R. 2359 ("TO CLARIS THE METHOD OF FEDERAL EXECUTIONS")

NACDL stands strongly opposed to creating a Death Capital, USA for federal executions as contemplated by this bill.

1. Isolation, Depersonalization, Due Process and the Eighth Amendment

The bill would place the entire federal death row population in one state (Indiana, the place of the BOP-identified facility). This will isolate and depersonalize the death row prisoner—who would routinely be taken far away from all those who care about him or her and are most concerned about his or her case (including, it appears, his or her post conviction attorney).

The United States Supreme Court has consistently held that the death penalty is "different in kind" from other punishments. Death cases are "different." The bill's contemplated centralization of the federal death penalty population away from friends, family and counsel offends basic due process and contravenes the Eighth Amendment's ban against cruel and unusual punishment.

2. Jurisdictional Concerns

28 USC section 2255 explicitly states that habeas petitions in these cases "may" be filed in the court from which the conviction and sentence arose. The "may" has been settled through decision to equal "shall." Is it the bill's aim to have the 2255 jurisdictional matter continue to be interpreted in this way? If so, the placing of the petitioner on Death Row, Indiana, seems certain to strain the attorney-client relationship in these cases beyond conscienable limits.

H.R. 2359 appears to envision that generally financially strapped habeas attorneys are supposed to talk with their clients about their cases long-distance (on prison-monitored telephone lines); and/or travel perhaps thousands of miles in order to talk with the death row client. By definition, this is not effective representation. It constitutes an effective deprivation of counsel at the critical post-conviction stage of death penalty proceedings.

It is at least equally troubling if the bill's intent is to modify or trump the above referenced provision of section 2255, and have the federal courts in the BOP-preferred Indiana (and the 7th Circuit) become the sole courts of "centralized" federal death penalty review. Why are Indiana and 7th Circuit federal judges the only ones equipped to rule on these petitions? Why are Indiana lawyers the only ones available to these prisoners/petitioners, and expected to take up the mantle of these difficult cases? Because the BOP wants it to be so? Even more basic: our federal system is based on the fundamental notion that diversity ("percolation") of circuit law is valuable, and a critical safeguard against injustice (i.e., checks and balances). This is especially critical in cases of life and death.

Also troubling is the bill's attempt to delete language that helps ensure that a death row prisoner/petitioner will not be sent to the executioner before having the opportunity to exhaust federal court procedures for appeal of the judgment of conviction and for review of the death sentence. We do not consider this language redundant or mere surplus age. Rather, it is a critical safeguard of the death case petitioner's rights.

This is especially important in light of certain provisions in the pending habeas bills. The bills seek to impose strict timetables on the federal courts to consider and render a decision in death penalty habeas cases (literally, days). And they appear to try to dictate to the federal courts that the failure of the courts to meet the deadlines shall not be grounds for the petitioner to obtain a stay of execution ("grounds for granting the petitioner relief from a judgment of conviction or sentence"). See *e.g.* S. 735, section 607.

Especially under (a) the speeded up death penalty habeas procedures pending before Congress and (b) the contemplated elimination of the knowledgeable and experienced Post-Conviction Defender Organizations (fka Death Penalty Resource Centers): we must be especially vigilant not to execute innocent people. H.R. 2359 would recklessly increase the chances of doing just this—(a) by separating the death case petitioner from his or her lawyer by hundreds or thousands of miles, and (b) by deleting a key statutory provision aimed at ensuring that a death row habeas petitioners shall not be subject to the "implementation of the [death] sentence" before his or her case appeal procedures have been exhausted and sentence of death reviewed.

3. Why Do It?

Finally, lethal injection, especially, can be carried out anywhere—in any federal prison facility with access to a doctor and a gurney. There is no need to centralize these people in Indiana as contemplated by this bill, and thereby raise so many grave risks and constitutional concerns.

Mr. MCCOLLUM. Thank you very much, Mr. Miller. I'm going to take a few questions myself at this point.

Mr. Tanton, the proposal by the Department of Justice which we have indicated a willingness to change to in the bill dealing with the DNA funding would jump the funding up to $15 million for fiscal year 1997 and $14 million for 1998, and then really phase dramatically back down to 6 and 4. Do you believe that the State laboratories can spend that large amount of money in 1997 and 1998 and then not be in a shortfall position in 1999 and 2000? Are we just moving money around in hopes that this is going to happen or is this real that we can actually spend this much money effectively in 1997?

Mr. TANTON. Yes, sir, I think that this is quite easy. As Assistant Director Ahlerich alluded, there are 100 laboratories right now doing DNA analysis. If you spread that money out evenly over those 100 laboratories over a period of 5 years, it would be an important aid, but it doesn't totally make the program. And what we envisioned when we looked at the bill in the first place was that it would be a seed to establish DNA analysis at the local venues so that it could be available and become part of the criminal justice system. At that point then, the local agencies and local government would take over to support this. That was always my vision of this, that this would be a seed, a starter at a crucial point, which I think we're at right now.

Mr. MCCOLLUM. And so the 15 million and the 14 million in those 2 years, pushed upfront like that, would let it be a seed for a lot more laboratories. You get them off the ground, you get them going, and you don't expect to have to come back here for a lot more increased funding, because once they're going, their own resources or State resources would provide the support necessary then. Is that right?

Mr. TANTON. Yes, sir. That's my view of it.

Mr. MCCOLLUM. Mr. Miller, a couple of questions for you. With regard to the death penalty issue that's there right now, isn't it true that in the Federal system today—Federal prison system—somebody convicted of a very heinous crime in California is often placed in a prison in Maine or Timbuktu, so to speak, so that the fact that you are moved away from your attorney and your family in the Federal system is not that uncommon today?

Mr. MILLER. Generally, they are housed someplace close at hand for purposes of appeal, and so on. In many areas there are regional facilities that have contracts with the Bureau of Prisons or the Marshals Service where they pay a per diem for inmates to be held there, so that they have access to counsel while this process is ongoing. In some circumstances, inmates are shipped through special security facilities, but generally the regional locator for the Bureau of Prisons tries to locate them somewhere close to family and not far afield from their natural geographic area. You may have a Florida individual convicted in New York in the Southern District in Manhattan who may end up being incarcerated somewhere in the Florida area.

It was mentioned earlier that there are death rows in many of the States, and that may be a resolution that would accomplish the localization of the inmate for purposes of their litigation and accomplish security concerns being answered as well.

Mr. MCCOLLUM. It doesn't bother the defense attorneys or the public policy from your perspective that Federal law would provide an avenue for the electric chair as opposed to lethal injection?

Mr. MILLER. That does bother me. I think that the method—I'm opposed to the idea because I see that innocent people occasionally get convicted and sometimes it takes 10 years before you find out that they didn't do it. I just had a case like that. Fortunately, it wasn't a death penalty. He wasn't there, he wasn't involved, but that's beside the point.

The method of State execution, Federal or State, is a matter that you ought to consider, and it ought to be more humane than such

matters as the gas chamber and the electric chair. And that is something I think that you ought to consider. And I think that——

Mr. MCCOLLUM. But you think that it could be done State by State rather than region by region. Your real complaint is just putting everybody in Terre Haute?

Mr. MILLER. If you put—one is if you put in Terre Haute. If you want a uniform procedure, you could have a Federal team of specialists that could deal with it in a State facility.

Mr. MCCOLLUM. I understand. With Mr. Scott's indulgence, I'm going to ask you one last question here. And it has to do with Mr. Chabot's bill. You indicated a concern that if you reduced from five to three the number of documents that are required to prove the crime or knowing possession with intent to use there would be a problem. We are already contemplating limiting this change to simply the transfer part of this crime. But I wanted to point out to you that under section 1028 of title 18 right now, while simple possession of five documents is indeed a crime of the type we've identified, the Government must prove more than that. You've got to have an interstate nexus. You've got to prove that the document is purported to have been issued under the authority of the United States or it was made with a document-making implement that is designed or suited for making a document issued by the United States, or that the accused otherwise acted with the intent to defraud the United States. In other words the criminal behavior must involve production, transfer, or possession that affects interstate or foreign commerce.

So, I think that the point I'm making with you is that while I respect the rest of your criticism, I think we—well, we didn't do it [laughter], but it passed Congress somewhere, and this particular case at least tied to an interstate nexus a lot better that *Lopez*, so it would appear.

Mr. MILLER. I think they did. I think, however, though, as you reduce the number of the nexus in interstate, which is a circumstantial factor often, as opposed to a direct factor, is reduced and weakened that much the more. And that's really the focus of my criticism.

Mr. MCCOLLUM. Mr. Scott.

Mr. SCOTT. Mr. Chairman, with all those conditions, I'm surprised you can get a conviction by having to show that the driver's license which was issued by State, presumably to buy alcohol and not defraud the United States, you could ever get a conviction for what we're aiming at.

Mr. MCCOLLUM. Well, not necessarily that you can get the conviction. You've got a lot of "ors" in here, though, but it does have to have—everyone on my list it does have to have some Federal nexus.

Mr. SCOTT. Mr. Miller, along the Federal connection, if all you have is simple possession in State of a product that has crossed State line, how do you get—for example, crack cocaine—how do you get past the *Lopez* defense?

Mr. MILLER. Crack cocaine is less difficult because cocaine is not a substance that's indigenous to this country. You just don't get the coca plant here, so it has to have come in from foreign commerce.

Mr. SCOTT. So? If you can prove that a firearm was possessed inside a drug-free zone by a school, you haven't gotten a Federal connection.

Mr. MILLER. That's correct. The school zone issue in that case was not a matter of Federal concern. The issue on the drugs, and my actual view is that there is, or ought to be, a question about that. Since there are whole series of State laws to deal with it, my view is it ought to be a State law issue rather than a Federal issue.

Mr. SCOTT. Mr. Tanton, on the budget, as I understand it, if the State or locality takes the money, it's for one-time expenses, and, therefore, in response to the gentleman from Florida, you would not be locking yourself into a budget that you would be responsible for later on. Is that an accurate assessment?

Mr. TANTON. Yes, sir, that's my understanding of it, that to access the money, each of the laboratories within a State, for instance, would apply separately. In your case in Virginia, I think that the system would apply for a grant and there would coordination, but——

Mr. SCOTT. The grant would be for training or equipment or something that you would spend the money and you would not have an ongoing budget for somebody else to pick up.

Mr. TANTON. If I understand you, that——

Mr. SCOTT. I think the question that the gentleman from Florida said, if you take the money and get a budget going, after the money stops you are stuck with a budget. And I think the point to be made here is these are one-time expenses.

Mr. TANTON. In two out of the three instances. In the case of getting new equipment, yes, that would be a one-time expense. In the concept of training, pretty close to a one-time expense, although you would have to train people. Although the reagent expenses, which are an ongoing expense, that would be an ongoing expense that would have to be picked up by the local government at some time.

Mr. SCOTT. Let me follow up on another thing on the death penalty cases that Mr. Miller mentioned. In following up on the gentleman from Florida, there's a difference between sending someone to serve a sentence and sending someone to death because a sentence is final and you don't expect appeals. With the death penalty, you assume that it will always be appealed up to the last minute. Is that a difference to——

Mr. MILLER. That is one difference. The current statute talks of in terms of a person being in the Attorney General's custody until exhaustion of appeal and review of the sentence.

Mr. SCOTT. And for death penalty, that would never occur?

Mr. MILLER. That does occur. There is, given the pending legislation that is going to shorten time and sort of cut off the never-ending nature of death penalty litigation. And that's why I mentioned that it has to be taken in conjunction with that litigation, because you have a shorter time frame, and that makes it more difficult to litigate those kinds of issues, to prepare to litigate those kinds of issues, particularly when in these cases, as so often is the case, the attorney coming in to do the post conviction, after trial litigation on this, is a different lawyer. They have to have access in the courthouse to the record. And they have to have access to the in-

mate. Now that's generally available and doable in most all Federal cases.

And the concern that we express to you is that this change would have an effect of not making that access available and, therefore, would be a diminishment of the opportunity to do fair litigation on some of these issues. And, in particular, our concern is that those who are actually innocent and could establish it wouldn't have the opportunity to do it.

Mr. SCOTT. With all the problems that occur, one would have to question whether the bureaucratic convenience would justify all of the problems that are created with this centralized location.

Mr. MILLER. I think that's right, Congressman. Thank you.

Mr. SCOTT. Thank you, Mr. Chairman.

Mr. MCCOLLUM. Thank you, Mr. Scott.

Mr. Heineman, you're recognized for 5 minutes.

Mr. HEINEMAN. Thank you, Mr. Chairman.

Just one small point, however, perhaps to allay Mr. Miller's concern over 1552 dealing with instate reduction of identification. I think the bill itself is clear on page 2, line 11, when it says "whoever knowingly sends through the mails or intending or knowing that it will be deposited for mailing." I think that does give the Federal Government standing as it relates to this issue. And I didn't read the Code; I don't know what the Code has to say, but I don't think that this 1552 even talks to the issue of the production of false identification within a State.

Mr. MILLER. Congressman, my concern is—and I apologize for being less than clear—it's so easy to make a fake ID, and then with this mailing issue in sections 1739, as you point out, subsection A, "whoever knowingly sends through the mails or intending or knowing that it will be deposited for mailing procures any unverified identification," and so on. Does "knowingly" mean that you know you are doing something that will mail it? Or does "knowingly" mean that it's a fake ID, and what is the burden on the individual who may be transmitting it? And is it something that could result in a minor case being a Federal case when the mailing provision, which is new—which means that if you send Johnnie's wallet in the mail to him at school after he comes home for Easter vacation, then is the parent perhaps, because they knowing that they mailed it, liable for a criminal violation?

Mr. HEINEMAN. Well, I think that the parent probably would be as liable as the mailman unless they knew that it was false identification.

Mr. MILLER. The "knowingly" is less than clear, it seems to me, in its first use in subsection A. And that is something that I wasn't clear on, but I think that to what it refers—knowing that it is false or knowing that you're going to mail—and I think that it's getting into an area where mere fake ID's, where there's no intent other than to bump one's age to get a reduced fair for an airline ticket as a student or to get alcohol to which one might not be entitled in the State where you are going to college which you might get at home. It is possible under this, and I don't think it's your intention to do this. And that's the focus of my remarks.

Mr. HEINEMAN. That's why we need lawyers. I'm not an attorney. I just look at this as a layman. And as a juror, it would be clear

to me what the intent of the legislation is. And that's all I have to say.

I yield back my time.

Mr. MCCOLLUM. Thank you, Mr. Heineman.

Mr. Barr, you're recognized for 5 minutes.

Mr. BARR. Thank you, Mr. Chairman.

Mr. Miller, two questions. The first one concerns 1552. You've talked about section 2. and I'm wondering if you have had a chance—I'm sure you have—but could you address any concerns you might have with section 3, particularly the attempt to define the term "unverified," continuing on the bottom of page 2 and into page 3 of the bill, if you have any thoughts on the language?

Mr. MILLER. Yes, that's in subsection (B)(1), and it says "The term 'unverified' with respect to identification documents means that the sender has not personally viewed a certificate or other written communication confirming age of the individual to be identified." Where you have mail order ID's that you get laminated, not official government documents that somebody sends, something like that, that kind of thing presents a problem here where you have individuals that are members of organizations where they might have their date of birth and they send into the national office their dues, and so on, and the national office sends back an ID card that is a laminated card that may have identifying information on it. That's a problem.

What's not clear to me also, and it's a greater problem, is whether or not someone who is mailing Johnnie's wallet to him from home, and Johnnie isn't the son, Johnnie is the son's roommate, and they didn't check, look through the wallet to see whether or not the ID is accurate. They know that their son is 18, the roommate is 18, and they didn't look through the roommate's wallet to see whether or not it had a 22-year-old age on the driver's license. That language is less than clear taking it the way I could see it interpreted by a judge telling a jury what to determine about it. It could be used to make a crime which I don't think you would intend to make criminal, or at least I hope you wouldn't. I hope you wouldn't want to get down to that level. And I'm afraid that the language accomplishes something that perhaps you didn't intend.

Mr. BARR. So you see some serious problems down the road if this legislation were enacted with this language in it in section 3?

Mr. MILLER. Yes, I do.

Mr. BARR. OK, thank you. With regard to our discussion concerning the Federal facility at Terre Haute with regard to prison death row inmates, Federal prisoners, with all due respect to my colleague from Virginia, I think that there's really more at issue here than just bureaucratic convenience. And I would hope that we would all agree on that. We may not agree on how much should be weighed against providing absolutely full and complete access by defense attorneys and family members to the death row inmates, but there are such things as the safety of the guards, and tremendous possible savings to taxpayers. So there's more than just bureaucratic convenience at stake here.

And I'm wondering if you've had any opportunity to look at the only similar experience that we have on the record recently, and that is the move from detaining the most dangerous Federal prison

inmates at Marion to the facility, the newer, more modern facility in Florence, CO. And it's my impression that, even though that's only been for about a year or so, there have not been serious problems with regard to defense attorneys and family members gaining access to those inmates that used to be housed at Marion and other facilities now being at Colorado. Are you aware of any serious problems that developed in that experience so far?

Mr. MILLER. I can't address that because I don't have the knowledge base on which to do it. But those individuals, as a general proposition, are in a different circumstance than someone who has a conviction where they're facing the ultimately penalty, and a shorter time frame imposed upon them which I anticipate will be the result of pending legislation. They don't have the same time constraints, and they don't—the habeas bills that are pending now are going to shorten the time frame, so they have luxury of more time. And they are not—statistically, an inmate who gets a death penalty sentence in this country is a minority from a lower social economic background and is more likely appointed than not. And so, if you are shortening the time frame in which that process is allowed to proceed and then moving them to a further distance location, you're compounding the problem.

The second factor is this: often those inmates aren't necessarily moved right away, immediately after conviction, to that facility. Sometimes those inmates are based there based on crimes and sentences, sometimes it's based on institutional record long after their sentence has been final and—"This guy's a bad actor, and we've got to move him here because we can't deal with him in Morgantown, WV, where we had him in the first place." So there's a whole array of different factors that will apply to the inmates that are at that facility as opposed to this particular bill.

Mr. BARR. OK, thank you.

Mr. MCCOLLUM. Thank you, Mr. Barr.

Well, I think both of you have done well answering our questions. I don't have any more to ask you today, but I thank you for coming—Mr. Tanton, particularly from my home State, now that you have identified it's Palm Beach you're from.

This hearing is adjourned.

[Whereupon, at 11:56 a.m., the subcommittee adjourned.]

APPENDIX

MATERIAL SUBMITTED FOR THE HEARING.

U. S. Department of Justice

Office of Legislative Affairs

Office of the Assistant Attorney General

Washington, D.C. 20530

October 18, 1995

The Honorable Bill McCollum
Chairman
Subcommittee on Crime
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This letter is in response to several questions raised at the September 28, 1995, hearing of the Subcommittee on Crime.

With regard to H.R. 2360, the community services projects bill, you asked how we would enforce the restriction on the resale of minimum-cost products made from scrap materials. The statutory language states that "such products shall not be resold by the recipient" and that these community services work programs are subject to "rules prescribed by the Attorney General." The rules would describe the resale restriction in more forceful terms. The ultimate enforcement would be at the level of the institution that implemented such a work program. If we found that a recipient entity was selling these products, we would immediately terminate our relationship with that entity.

In connection with H.R. 2359, several questions were raised at the hearing concerning the place of incarceration of Federal offenders with death sentences. However, H.R. 2359 does not focus on this issue, but rather would allow for Federal executions to be carried out in Federal facilities by clarifying the law involving the method utilized in Federal executions. With regard to the housing of inmates with Federal sentences, including those inmates with death sentences, the Bureau of Prisons already has the statutory authority to house inmates in appropriate facilities designated by the Bureau. H.R. 2359 would have no effect on the Bureau's authority in regard to making housing decisions for these inmates.

The scope of the changes contemplated under H.R. 2359 is very narrow. By amending 18 U.S.C. §3596, the bill would remove the current death penalty procedures which provide that State methods of execution are to be used in Federal executions. For Federal death sentence convictions in States that do not have the

death penalty, the current wording of §3596 would mandate that the sentencing court designate another State in which the execution would have to be carried out. H.R. 2359 would eliminate these confusing procedures and replace them with a uniform system for implementing Federal death sentences in Federal facilities pursuant to regulations promulgated by the Attorney General.

It is our position that States should not be burdened with the difficult duties of carrying out Federal executions. State governments and correctional systems are currently busy enough with their own cases. When this issue has come up during informal discussions with State officials, the view of these officials has been that they are not interested in having any involvement with Federal executions. In as much as there is a Bureau of Prisons facility which was specifically constructed to carry out Federal executions, it makes little sense for the Federal government to spend extra funds to reimburse States for carrying out this duty, thereby unnecessarily shifting the practical burdens of this Federal responsibility to the States.

Although H.R. 2359 does not make any stipulations with regard to the housing of inmates with Federal death sentences, as a matter of correctional policy the Bureau of Prisons has planned to incarcerate these offenders in one maximum security facility. The United States Penitentiary in Terre Haute, Indiana has been chosen as this site. Choosing one site for the incarceration of these inmates is not a unique correctional policy determination by the Bureau. This situation is analogous to other special categories of inmates that are currently incarcerated in specific facilities by the Bureau, such as the highest-level maximum security prisoners or inmates requiring mental health treatment.

Inmates under a sentence of death pose particular correctional management and security concerns for the Bureau due to the nature of their sentences. For this reason, the Bureau has determined that having one housing unit specifically geared towards the task of appropriately incarcerating these inmates is the most effective and efficient policy. The Department is certainly cognizant of the concerns raised at the hearing involving adequate access to counsel. In incarcerating Federal offenders with death sentences, the Bureau of Prisons will take all appropriate steps to ensure that these inmates are afforded access to their attorneys, as well as their families and other visitors.

In response to the question about the percent of Federal capital punishment cases that have been overturned upon appeal, since 1988, when the Federal death penalty was re-established, there have been six Federal death penalty sentences, none of which have been overturned as a result of an appellate review.

Regarding H.R. 1533 and the inquiry concerning the number of crimes committed by individuals on escape status, unfortunately this information is not retrievable through the use of any of our existing automated data systems. Even without this information, we believe that there are strong policy reasons for supporting this legislation, which are to help ensure the safety of law enforcement personnel and members of the public from the dangers inherent in escapes and attempted escapes by providing for appropriate penalties for this very serious offense.

We are pleased to assist the Subcommittee's consideration of these bills. Please do not hesitate to contact me if you have additional questions on these matters.

Sincerely,

Andrew Fois
Assistant Attorney General

cc: The Honorable Charles E. Schumer
Ranking Minority Member

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